

# Competency Based Medical Education (CBME) Curriculum

# MBBS Phase-III (Part-II)

(As per the "Regulations on Graduate Medical Education (Amendment), 2019 by Board of Governors In Super-Session of Medical Council of India Amendment Notification New Delhi, dtd. 4<sup>th</sup> November, 2019")



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## BLDE

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The Constituent college

## SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA

Smt. Bangaramma sajjan Campus, B. M. Patil Road (Sholapur Road), Vijayapura - 586103, Karnataka, India. BLDE (DU) Phone: +9108352-262770, Fax : +918352-263303, Website : www.bldedu.ac.in, E-mail: office@bldedu.ac.in College Phone : +918352-262770, Fax : +918352-263019, E-mail: bmpmc.principal@bldedu.ac.in



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## SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA

BLDH(DU)/REG/Key/UG Curri/2023-24 [3018

February 27, 2023

BLDE (Deemed to be University) Viayapura-588103, Kamataka

## NOTIFICATION

- Sult: Competency Based Medical Education (CBME) based Revision of Craviculum of MBBS Phase-III Part II, 2022-23.
- Ref: 1. NMC New CBME Guidelines.
  - Minutes of the 9<sup>th</sup> meeting of Standing Committee of Academic Council held on 23.02.2023
  - 3. Approval of Hon 'ble Vice-Chancellor vide no. 1045/1 and 27.02.2021.

On approval of the I<sup>th</sup> meeting of Standing Committee of Academic Cosmeil and on approval of Hos/ble Vice-Chancellor the revision of Curriculum for MBBS Phase-III Part II programme has been approved.

The revised curriculum shall be effective from the Academic Session 2023-34 onwards, for MBBS Phase-III Part II programme in the constituent College of the University viz. Stri. B. M. Patil, Medical College, Hospital and Research Centre.

Cupy to:

- · The Secretary, UGC, New Delhi -
- · The Principal & Dean, Faculty of Medicine
- · The Vice-Principal (Pre and Pare Clinical)
- The Visa Principal (Clinical)
- · The Controller of Examinations
- · The Dean, Student Affairs
- · The Prof. and HoD of Pre. Para & Clinical Departments
- · All the Concerned Officials
- + The Co-ordinator/ Director, JQAC
- The Assistant Registrar

Copy respectfully automated to:

- The Hon'his Pro-Clussesfier
- The Hen'ble Vice-Chancellor
- The Hon'ble Pro Vice-Chenceller

first, Bangaramma Sojian Campus, B. M. Patil Haul (Stolaput Roud), Vijayopura - 586103, Karnataka, Inda

BLDE (DU): Phane: +918353-363770, Fax: +918352-263303, Website: www.bidedu.ac.m, E-mill mRosjibitedu.ac.in College: Phane: +918353-362770, Fax: +918352-263019, E-mail: temporprint/palitidedu.ac.m.

## Vision

To be a leader in providing quality medical education, healthcare & to become an Institution of eminence involved in multidisciplinary and translational research, the outcome of which can impact the health & the quality of life of people of this region.

## Mission

- To be committed to promoting sustainable development of higher education, including health science education consistent with statutory and regulatory requirements.
- To reflect the needs of changing technology.
- Make use of academic autonomy to identify dynamic educational programs.
- To adopt the global concepts of education in the healthcare sector

## Introduction

The revised M.B.B.S curriculum of The Medical Council of India (MCI) came into effect from May 1997 and it has undergone amendments thereof. The BLDE Deemed to be University has implemented the new regulations for the batches of students admitted to the M.B.B.S course from the academic year 2008-09 and onwards. Later the curriculum was revised in 2012-13 and 2016-17. This fourth revision will be implemented for the batches of students admitted to the M.B.B.S Course from the academic year 2019-20 onwards. The fourth revision, in consonance with MCI, adopts Competency Based Medical Education from the year 2019-20.

### **SECTION - I**

## **Objectives of Medical Education**

## (As stated in MCI Regulations, 1997 amended up to May 2018)

This section contains the goals and general objectives of graduate medical education as stated in MCI Regulations.

### **Competencies for the Indian Medical Graduate**

This content is cited from "Medical Council of India, Competency based Undergraduate curriculum for the Indian Medical Graduate, 2018. (Vol.1; pages 14-20.)"

Section 1 provides the global competencies extracted from the Graduate Medical Education Regulations, 2018. The global competencies identified as defining the roles of the Indian Medical Graduate are the broad competencies that the learner has to aspire to achieve; teachers and curriculum planners must ensure that the learning experiences are aligned to this Manual.

### **Extract from the Graduate Medical Education Regulations, 2018**

## **Objectives of the Indian Graduate Medical Training Programme**

The undergraduate medical education program is designed with a goal to create an "Indian Medical Graduate" (IMG) possessing requisite knowledge, skills, attitudes, values and responsiveness, so that she or he may function appropriately and effectively as a physician of first contact of the community while being globally relevant. To achieve this, the following national and institutional goals for the learner of the Indian Medical Graduate training program are hereby prescribed:

## 2.1. National Goals

At the end of undergraduate program, the Indian Medical Graduate should be able to:

- a) recognize "health for all" as a national goal and health right of all citizens and by undergoing training for medical profession fulfill his/her social obligations towards realization of this goal.
- b) learn every aspect of National policies on health and devote herself/himself to its practical implementation.
- c) achieve competence in practice of holistic medicine, encompassing promotive, preventive, curative and rehabilitative aspects of common diseases.
- d) develop scientific temper, acquire educational experience for proficiency in profession and promote healthy living.
- e) become exemplary citizen by observance of medical ethics and fulfilling social and professional obligations, so as to respond to national aspirations.

## **2.2. Institutional Goals**

In consonance with the national goals, each medical institution should evolve institutional goals to define the kind of trained manpower (or professionals) they intend to produce. The Indian Medical Graduates coming out of a medical institute should:

- a) be competent in diagnosis and management of common health problems of the individual and the community, commensurate with his/her position as a member of the health team at the primary, secondary or tertiary levels, using his/her clinical skills based on history, physical examination and relevant investigations.
- b) be competent to practice preventive, promotive, curative and rehabilitative medicine in respect to the commonly encountered health problems.
- c) appreciate rationale for different therapeutic modalities, be familiar with the administration of the "essential drugs" and their common side effects.
- d) be able to appreciate the socio-psychological, cultural, economic and environmental factors affecting health and develop humane attitude towards the patients in discharging one's professional responsibilities
- e) possess the attitude for continued self learning and to seek further expertise or to pursue research in any chosen area of medicine, action research and documentation skills.

BLDE (Deemed to be University)

- f) be familiar with the basic factors which are essential for the implementation of the National Health Programs including practical aspects of the following:
  - Family Welfare and Maternal and Child Health (MCH);
  - Sanitation and water supply;
  - Prevention and control of communicable and non-communicable diseases;
  - Immunization;
  - Health Education;
  - Indian Public Health Standards (IPHS) at various level of service delivery;
  - Bio-medical waste disposal; and
  - Organizational and or institutional arrangements.
- g) acquire basic management skills in the area of human resources, materials and resource management related to health care delivery, General and hospital management, principal inventory skills and counseling.
- h) be able to identify community health problems and learn to work to resolve these by designing, instituting corrective steps and evaluating outcome of such measures.
- i) be able to work as a leading partner in health care teams and acquire proficiency in communication skills.
- j) be competent to work in a variety of health care settings.
- k) have personal characteristics and attitudes required for professional life including personal integrity, sense of responsibility and dependability and ability to relate to or show concern for other individuals.

All efforts must be made to equip the medical graduate to acquire the skills as detailed in Table 11 Certifiable procedural skills – A Comprehensive list of skills recommended as desirable for Bachelor of Medicine and Bachelor of Surgery (MBBS) – Indian Medical Graduate, as given in the Graduate Medical Education Regulations, 2018

## 2. 3. Goals for the Learner

In order to fulfil this goal, the Indian Medical Graduate must be able to function in the following roles appropriately and effectively:

- 2.3.1. Clinician who understands and provides preventive, promotive, curative, palliative and holistic care with compassion.
- 2.3.2. Leader and member of the health care team and system with capabilities to collect, analyze, synthesize and communicate health data appropriately.

2.3.3. Communicator with patients, families, colleagues and community. *Objectives of Medical Education* 

- 2.3.4. Lifelong learner committed to continuous improvement of skills and knowledge.
- 2.3.5. Professional, who is committed to excellence, is ethical, responsive and accountable to patients, community and profession.

#### 3. Competency Based Training Programme of the Indian Medical Graduate

Competency based learning would include designing and implementing medical education curriculum that focuses on the desired and observable ability in real life situations. In order to effectively fulfil the roles as listed in clause 2, the Indian Medical Graduate would have obtained the following set of competencies at the time of graduation:

# 3.1. Clinician, who understands and provides preventive, promotive, curative, palliative and holistic care with compassion.

- 3.1.1 Demonstrate knowledge of normal human structure, function and development from a molecular, cellular, biologic, clinical, behavioral and social perspective.
- 3.1.2. Demonstrate knowledge of abnormal human structure, function and development from a molecular, cellular, biological, clinical, behavioural and social perspective.
- 3.1.3 Demonstrate knowledge of medico-legal, societal, ethical and humanitarian principles that influence health care.
- 3.1.4 Demonstrate knowledge of national and regional health care policies including the National Health Mission that incorporates National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM), frameworks, economics and systems that influence health promotion, health care delivery, disease prevention, effectiveness, responsiveness, quality and patient safety.
- 3.1.5. Demonstrate ability to elicit and record from the patient, and other relevant sources including relatives and caregivers, a history that is complete and relevant to disease identification, disease prevention and health promotion.
- 3.1.6. Demonstrate ability to elicit and record from the patient, and other relevant sources including relatives and caregivers, a history that is contextual to gender, age, vulnerability, social and economic status, patient preferences, beliefs and values.
- 3.1.7 Demonstrate ability to perform a physical examination that is complete and relevant to disease identification, disease prevention and health promotion.
- 3.1.8 Demonstrate ability to perform a physical examination that is contextual to gender, social and economic status, patient preferences and values.

- 3.1.9 Demonstrate effective clinical problem solving, judgment and ability to interpret and integrate available data in order to address patient problems, generate differential diagnoses and develop individualized management plans that include preventive, promotive and therapeutic goals.
- 3.1.10 Maintain accurate, clear and appropriate record of the patient in conformation with legal and administrative frameworks.
- 3.1.11 Demonstrate ability to choose the appropriate diagnostic tests and interpret these tests based on scientific validity, cost effectiveness and clinical context.
- 3.1.12 Demonstrate ability to prescribe and safely administer appropriate therapies including nutritional interventions, pharmacotherapy and interventions based on the principles of rational drug therapy, scientific validity, evidence and cost that conform to established national and regional health programmes and policies for the following:
  - i) Disease prevention,
  - ii) Health promotion and cure,
  - iii) Pain and distress alleviation, and
  - iv) Rehabilitation and palliation Demonstrate ability to provide a continuum of care at the primary and/or secondary level that addresses chronicity, mental and physical disability.
- 3.1.13 Demonstrate ability to appropriately identify and refer patients who may require specialized or advanced tertiary care.
- 3.1.14 Demonstrate familiarity with basic, clinical and translational research as it applies to the care of the patient.

#### 3.2. Leader and member of the health care team and system

- 3.2.1 Work effectively and appropriately with colleagues in an inter-professional health care team respecting diversity of roles, responsibilities and competencies of other professionals.
- 3.2.2 Recognize and function effectively, responsibly and appropriately as a health care team leader in primary and secondary health care settings.
- 3.2.3 Educate and motivate other members of the team and work in a collaborative and collegial fashion that will help maximize the health care delivery potential of the team.
- 3.2.4 Access and utilize components of the health care system and health delivery in a manner that is appropriate, cost effective, fair and in compliance with the national

health care priorities and policies, as well as be able to collect, analyze and utilize health data.

- 3.2.5 Participate appropriately and effectively in measures that will advance quality of health care and patient safety within the health care system.
- 3.2.6 Recognize and advocate health promotion, disease prevention and health care quality improvement through prevention and early recognition in a) life style diseases and b) cancer, in collaboration with other members of the health care team.

#### 3.3. Communicator with patients, families, colleagues and community

- 3.3.1 Demonstrate ability to communicate adequately, sensitively, effectively and respectfully with patients in a language that the patient understands and in a manner that will improve patient satisfaction and health care outcomes.
- 3.3.2 Demonstrate ability to establish professional relationships with patients and families that are positive, understanding, humane, ethical, empathetic, and trustworthy.
- 3.3.3 Demonstrate ability to communicate with patients in a manner respectful of patient's preferences, values, prior experience, beliefs confidentiality and privacy.
- 3.3.4 Demonstrate ability to communicate with patients, colleagues and families in a manner that encourages participation and shared decision making.

#### 3.4. Lifelong learner committed to continuous improvement of skills and knowledge

- 3.4.1. Demonstrate ability to perform an objective self-assessment of knowledge and skills, continue learning, refine existing skills and acquire new skills.
- 3.4.2. Demonstrate ability to apply newly gained knowledge or skills to the care of the patient.
- 3.4.3. Demonstrate ability to introspect and utilize experiences, to enhance personal and professional growth and learning.
- 3.4.4. Demonstrate ability to search (including through electronic means), and critically revaluate the medical literature and apply the information in the care of the patient.
- 3.4.5. Be able to identify and select an appropriate career pathway that is professionally rewarding and personally fulfilling.

# **3.5.** Professional who is committed to excellence, is ethical, responsive and accountable to patients, community and the profession

3.5.1. Practice selflessness, integrity, responsibility, accountability and respect.

3.5.2. Respect and maintain professional boundaries between patients, colleagues and society. *Objectives of Medical Education* 

- 3.5.3. Demonstrate ability to recognize and manage ethical and professional conflicts.
- 3.5.4. Abide by prescribed ethical and legal codes of conduct and practice.
- 3.5.5. Demonstrate a commitment to the growth of the medical profession as a whole.

## **Broad Outline on training format**

# 4.1. In order to ensure that training is in alignment with the goals and competencies listed in sub-clause 2 and 3 above:

- 4.1.1 There shall be a "Foundation Course" to orient medical learners to MBBS programme, and provide them with requisite knowledge, communication (including electronic), technical and language skills.
- 4.1.2 The curricular contents shall be vertically and horizontally aligned and integrated to the maximum extent possible in order to enhance learner's interest and eliminate redundancy and overlap.
- 4.1.3 Teaching-learning methods shall be learner centric and shall predominantly include small group learning, interactive teaching methods and case based learning.
- 4.1.4 Clinical training shall emphasize early clinical exposure, skill acquisition, certification in essential skills; community/primary/secondary care-based learning experiences and emergencies.
- 4.1.5 Training shall primarily focus on preventive and community based approaches to health and disease, with specific emphasis on national health priorities such as family welfare, communicable and non communicable diseases including cancer, epidemics and disaster management.
- 4.1.6 Acquisition and certification of skills shall be through experiences in patient care, diagnostic and skill laboratories.
- 4.1.7 The development of ethical values and overall professional growth as integral part of curriculum shall be emphasized through a structured longitudinal and dedicated programme on professional development including attitude, ethics and communication.
- 4.1.8 Progress of the medical learner shall be documented through structured periodic assessment that includes formative and summative assessments. Logs of skill-based training shall be also maintained.
- 4.2 Appropriate Faculty Development Programmes shall be conducted regularly by institutions to facilitate medical teachers at all levels to continuously update their professional and teaching skills, and align their teaching skills to curricular objectives.

#### **SECTION - II**

#### **REGULATIONS GOVERNING M.B.B.S. DEGREE COURSE**

(Eligibility for Admission, Duration, Attendance and Scheme of Examination as per the norms laid down in the Regulations on Graduate Medical Education of Medical Council of India and the amendments thereof (May 2018); admission to UG course - MBBS)

## 1. ELIGIBILITY

#### **1.1 Qualifying Examination**

Student seeking admission to first MBBS course:

 shall have passed two year Pre University examination conducted by Department of Pre University Education, Karnataka State, with English as one of the subjects and Physics, Chemistry and Biology as optional subjects. The candidate shall have passed subjects of English, Physics, Chemistry and Biology individually.

#### OR

ii) shall have passed any other examination conducted by Boards / Councils / Intermediate examination established by State Governments / Central Government and recognized as equivalent to two year Pre University examination by the BLDE Deemed to be University / Association of Indian Universities (AIU), with English as one of the subjects and Physics, Chemistry and Biology as optional subjects and the candidate shall have passed subjects of English, Physics, Chemistry and Biology individually.

#### OR

shall have passed Intermediate examination in Science of an Indian University / Board
 / council or other recognized examining bodies with Physics, Chemistry and Biology,
 which shall include a practical test in these subjects and also English as compulsory
 subject. The candidate shall have passed subjects of English, Physics, Chemistry and
 Biology individually.

### OR

 shall have passed first year of the three year degree course of a recognized University with Physics, Chemistry and Biology including a practical test in these subjects provided the examination is an 'University Examination' provided that the candidate shall have passed subjects of English, Physics, Chemistry and Biology individually in the Pre University or other examinations mentioned in the clauses above.

### OR

v) shall have passed B.Sc. Examination of an Indian University, provided that he/she has passed the B.Sc. examination with not less than two of the following subjects: Physics, Chemistry, Biology (Botany, Zoology) provided that candidate has passed subjects of English, Physics, Chemistry and Biology individually in the qualifying examinations mentioned in clauses (i) (ii) and (iii).

Note: Candidates who have passed "Physical Science" instead of Physics and Chemistry as two separate subjects are not eligible for admission to MBBS course as per Medical Council of India Regulations vide letter MCI-37(2)/2001/Med.922 dated 14.02.2001

## 1.2 Marks

The selection of students shall be based on merit provided that:

 a) In case of admission on the basis of qualifying examination, a candidate for admission to MBBS course must have passed individually in the subjects of Physics, Chemistry, Biology and English and must have obtained not less than 50% marks for general category,40% for SC,ST and OBC students taken together in Physics, Chemistry and Biology in the qualifying examination.

The minimum marks shall not be less than 45% taken together in Physics, Chemistry and Biology for physically handicapped candidates with lower limb locomotor disability of 40 to 70%.

- **b)** The student shall appear for All India National Eligibility cum Entrance Test [NEET] and must qualify securing valid rank.
- Age: The candidate should have completed 17 years of age on or before 31<sup>st</sup> day of December of the year of admission.

Eligibility criteria for admission to the MBBS Course shall be as per Graduate Medical Education regulations of Medical Council of India and its amendments there of existing at the time of admission.

## PHASE WISE TRAINING AND TIME DISTRIBUTION FOR PROFESSIONAL DEVELOPMENT

The Competency based Undergraduate Curriculum and Attitude, Ethics and Communication (AETCOM) course, aspublished by the Medical Council of India and also made available on the Council's website, shall be the curriculum for the batches admitted in MBBS from the academic year 2019-20 onwards.

Provided that in respect of batches admitted prior to the academic year 2019-20, the governing provisions shall remain as contained in the Part I of these Regulations.

#### 7. Training period and time distribution:

- 7.1. Every learner shall undergo a period of certified study extending over 4 <sup>1</sup>/<sub>2</sub> academic years, divided into nine semesters from the date of commencement of course to the date of completion of examination which shall be followed by one year of compulsory rotating internship.
- 7.2. Each academic year will have at least 240 teaching days with a minimum of eight hours of working on each day including one hour as lunch break.
- 7.3. Teaching and learning shall be aligned and integrated across specialties both vertically and horizontally for better learner comprehension. Learner centered learning methods should include problem oriented learning, case studies, community oriented learning, self-directed and experiential learning.

#### 7.4. The period of 4 <sup>1</sup>/<sub>2</sub> years is divided as follows:

- 7.4.1 Pre-Clinical Phase [(Phase I) First Professional phase of 13 months preceded by Foundation Course of one month]: will consist of preclinical subjects – Human Anatomy, Physiology, Biochemistry, Introduction to Community Medicine, Humanities, Professional development including Attitude, Ethics & Communication (AETCOM) module and early clinical exposure, ensuring both horizontal and vertical integration.
- 7.4.2 Para-clinical phase [(Phase II) Second Professional (12 months)]: will consist of Paraclinical subjects namely Pathology, Pharmacology, Microbiology, Community Medicine, Forensic Medicine and Toxicology, Professional development including

Attitude, Ethics & Communication (AETCOM) module and introduction to clinical subjects ensuring both horizontal and vertical integration.

The clinical exposure to learners will be in the form of learner-doctor method of clinical training in all phases. The emphasis will be on primary, preventive and comprehensive healtcare. A part of trainduring clinical postings should take place at the *primary level* of health care. It is desirable to provide learning experiences in secondary health care, wherever possible. This will involve:

- (a) Experience in recognizing and managing common problems seen in outpatient, inpatient and emergency settings,
- (b) Involvement in patient care as a team member,
- (c) Involvement in patient management and performance of basic procedures.
- 7.4.3 Clinical Phase [(Phase III) Third Professional (28 months)]
  - (a) Part I (13 months) The clinical subjects include General Medicine, General Surgery, Obstetrics & Gynaecology, Pediatrics, Orthopaedics, Dermatology, Otorhinolaryngology, Ophthalmology, Community Medicine, Forensic Medicine and Toxicology, Psychiatry, Respiratory Medicine, Radiodiagnosis & Radiotherapy and Anaesthesiology & Professional development including AETCOM module.
  - (b) Electives (2 months) : To provide learners with opportunity for diverse learning experiences, to do research/community projects that will stimulate enquiry, self directed experimental learning and lateral thinking [9.3].
  - (c) Part II (13 months) Clinical subjects include:
    - i. Medicine and allied specialties (General Medicine, Psychiatry, Dermatology Venereology and Leprosy (DVL), Respiratory Medicine including Tuberculosis)
    - ii. Surgery and allied specialties (General Surgery, Orthopedics [including trauma]), Dentistry, Physical Medicine and rehabilitation, Anaesthesiology and Radiodiagnosis)
    - iii. Obstetrics and Gynecology (including Family Welfare)
    - iv. Pediatrics
    - v. AETCOM module

7.5 Didactic lectures shall not exceed one third of the schedule; two third of the schedule shall include interactive sessions, practicals, clinical or/and group discussions. The *Regulations Governing MBBS Degree Course*  learning process should include clinical experiences, problem oriented approach, case studies and community health care activities.

- 7.6 Universities shall organize admission timing and admission process in such a way that teaching in the first Professional year commences with induction through the Foundation Course by the 1st of August of each year.
  - (i) Supplementary examinations shall not be conducted later than 90 days from the date of declaration of the results of the main examination, so that the learners who pass can join the main batch for progression and the remainder would appear for the examination in the subsequent year.
  - (ii) A learner shall not be entitled to graduate later than ten (10) years of her/his joining the first MBBS course.
- 7.7 No more than four attempts shall be allowed for a candidate to pass the first Professional examination. The total period for successful completion of first Professional course shall not exceed four (4) years. Partial attendance of examination in any subject shall be counted as an attempt.
- 7.8 A learner, who fails in the second Professional examination, shall not be allowed to appear in third Professional Part I examination unless she/he passes all subjects of second Professional examination.
- 7.9 Passing in third Professional (Part I) examination is not compulsory before starting part II training; however, passing of third Professional (Part I) is compulsory for being eligible for third Professional (Part II) examination.
- 7.10 During para-clinical and clinical phases, including prescribed 2 months of electives, clinical postipostings of three hours duration daily as specified in Tables 5, 6, 7 and 8 would apply for various departments.

#### 8. Phase distribution and timing of examination

- 8.1 Time distribution of the MBBS programme is given in Table 1.n
- 8.2 Distribution of subjects by Professional Phase-wise is given in Table 2.
- 8.3 Minimum teaching hours prescribed in various disciplines are as under Tables 3-7.
- 8.4 Distribution of clinical postings is given in Table 8.

Regulations Governing MBBS Degree Course

- 8.5 Duration of clinical postings will be:
- 8.5.1 Second Professional : 36 weeks of clinical posting (Three hours per day five days per week : Total 540 hours)
- 8.5.2 Third Professional part I: 42 weeks of clinical posting (Three hours per day six days per week : Total 756 hours)
- 8.5.3 Third Professional part II: 44 weeks of clinical posting (Three hours per day six days per week : Total 792 hours)
- 8.6 Time allotted excludes time reserved for internal / University examinations, and vacation.
- 8.7 Second professional clinical postings shall commence before / after declaration of results of the first professional phase examinations, as decided by the institution/ University. Third Professional parts I and part II clinical postings shall start no later than two weeks after the completion of the previous professional examination.
- 8.8 25% of allotted time of third Professional shall be utilized for integrated learning with pre- and para- clinical subjects. This will be included in the assessment of clinical subjects.

## **DURATION OF THE COURSE**

i) Every student shall undergo a period of certified study extending over  $4^{1/2}$  Academic years from the date of commencement of this study for the subject comprising the medical curriculum to the date of completion of the examination followed by one year compulsory rotating Internship.

The  $4^{1}/_{2}$  years course has been divided into three Phases.

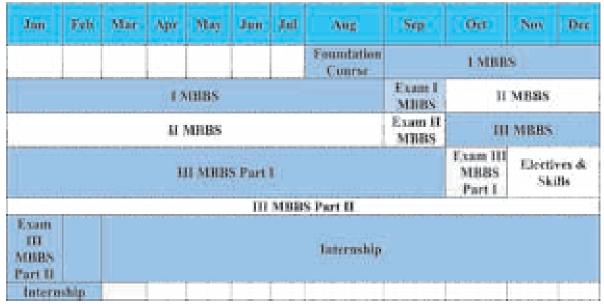


Table 1: Time distribution of MBBS Programme & Examination Schedule

Regulations Governing MBBS Degree Course

One month is provided at the end of every professional year for completion of examination and declaration of results.

## Distribution of the duration of various components of the MBBS Course

## TABLE 2 DISTRIBUTION OF SUBJECTS PROFESSIONAL PHASEWISE HERE

Table 2: Distribution of subjects by professional phase

Phase & Year Of MBBB Training	Subjects & New Teaching Elements	Duration	University Examination
First professional MBBS	<ul> <li>Foundation course (1month)</li> <li>Human Anatomy, Physiology&amp; Biochemistry Introduction of Community Medicine ,Humanities</li> <li>Early Clinical Exposure</li> <li>Attitude. Ethics and Communication Module (AETCOM)</li> </ul>	1+13 months	I Professional
Second Professional MBBS	<ul> <li>Pathology, Microbiology, Pharmacology, Forensic Medicine And Toxicology</li> <li>Introduction to clinical subjects including community Medicine</li> <li>Clinical postings</li> <li>AETCOM</li> </ul>	12 months	II Professional
Third Professional MBBS Part I	<ul> <li>General Medicine ,General Surgery, OBG. Paediatrics , Orthopaedics ,Dermatology,PyschiatryOtorhinolaryngology,Op hthalmology,community Medicine ,Forensic Medicine and Toxicology, Respiratory Medicine ,Radiodiagnosis &amp; Radiotherapy, Anaesthesiology</li> <li>Clinical Subjects /postings</li> <li>AETCOM</li> </ul>	12+1 months	III Professional (Part1)
Electives	* Electives ,skills and assessment	2 months	
Third Professional MBBS Part II	<ul> <li>General Medicine ,Paediatrics, General Surgery, Orthopaedics, Obstetrics and Gynaecology including Family welfare and allied specialties</li> <li>Clinical Postings /subjects</li> <li>AETCOM</li> </ul>	13 months	III Professional (Part II)

\*Assessment of electives shall be included in Internal Assessment

## ATTENDANCE & ELIGIBILTY TO TO APPEAR FOR UNIVERSITY PROFESSIONAL EXAMINATION

## [Based o nthe GMR 2019 Regulations 2019 clause no 11.I & its subcauses page nos 82-83]

Eligibility to appear for Professional examinations :

The performance in essential components of training are to be assessed, based on:

(a) Attendance:

- 1. Attendance requirements are 75% in theory and 80% in practical /clinical for eligibility to appear for the examinations in that subject. In subjects that are taught in more than one phase the learner must have 75% attendance in theory and 80% in practical in each phase of instruction in that subject.
- 2. If an examination comprises more than one subject (for e.g., General Surgery and allied branches), the candidate must have 75% attendance in each subject and 80% attendance in each clinical posting.
- 3. Learners who do not have at least 75% attendance in the electives will not be eligible for the Third Professional Part II examination.
- (b) Internal Assessment:

Internal assessment shall be based on day-to-day assessment. It shall relate to different ways in which learners participate in learning process including assignments, preparation for seminar, clinical case presentation, preparation of clinical case for discussion, clinical case study/problem solving exercise, participation in project for health care in the community, proficiency in carrying out a practical or a skill in small research project, a written test etc.

- 1. Regular periodic examinations shall be conducted throughout the course. There shall be no less than three internal assessment examinations in each Preclinical / Para-clinical subject and no less than two examinations in each clinical subject in a professional year. An end of posting clinical assessment shall be conducted for each clinical posting in each professional year.
- 2. When subjects are taught in more than one phase, the internal assessment must be done in each phase and must contribute proportionately to final assessment. For example, General Medicine must be assessed in second Professional, third Professional Part I and third Professional Part II, independently.
- 3. Day to day records and log book (including required skill certifications) should be given importance in internal assessment. Internal assessment should be based on competencies and skills.

- 4. The final internal assessment in a broad clinical specialty (e.g., Surgery and allied specialties etc.) shall comprise of marks from all the constituent specialties. The proportion of the marks for each constituent specialty shall be determined by the time of instruction allotted to each.
- 5. Learners must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject. Internal assessment marks will reflect as separate head of passing at the summative examination.
- 6. The results of internal assessment should be displayed on the notice board within a 1-2 weeks of the test. Universities shall guide the colleges regarding formulating policies for remedial measures for students who are either not able to score qualifying marks or have missed on some assessments due to any reason.
- 7. Learners must have completed the required certifiable competencies for that phase of training and completed the log book appropriate for that phase of training to be eligible for appearing at the final university examination of that subject.

The Principal should notify at the college the attendance details at the end of the each term without fail under intimation to this University. The candidate lacking in the prescribed attendance and progress in any subject(s) in theory or practical/clinical in the first appearance should not be permitted to appear for the examination in that subject(s).

### New teaching / learning elements

### 9.1. Foundation Course

- 9.1.1 Goal: The goal of the Foundation Course is to prepare a learner to study medicine effectively. It will be of one month duration after admission.
- 9.1.2 Objectives: The objectives are to: (a) Orient the learner to: (i) The medical profession and the physician's role in society (ii) The MBBS programme (iii) Alternate health systems in the country and history of medicine (iv) Medical ethics, attitudes and professionalism (v) Health care system and its delivery (vi) National health programmes and policies (vii) Universal precautions and vaccinations (viii) Patient

safety and biohazard safety (ix) Principles of primary care (general and community based care) (x) The academic ambience

- (b) Enable the learner to acquire enhanced skills in: (i) Language (ii) Interpersonal relationships (iii) Communication (iv) Learning including self-directed learning (v) Time management (vi) Stress management (vii) Use of information technology
- (c) Train the learner to provide: (i) First-aid (ii) Basic life support
- 9.1.3 In addition to the above, learners may be enrolled in one of the following programmes which will be run concurrently: (a) Local language programme (b) English language programme (c) Computer skills (d) These may be done in the last two hours of the day for the duration of the Foundation Course.
- 9.1.4 These sessions must be as interactive as possible.
- 9.1.5 Sports (to be used through the Foundation Course as protected 04 hours / week).
- 9.1.6 Leisure and extracurricular activity (to be used through the Foundation Course as protected 02 hours per week)
- 9.1.7 Institutions shall develop learning modules and identify the appropriate resource persons for their delivery.
- 9.1.8 The time committed for the Foundation Course may not be used for any other curricular activity.
- 9.1.9 The Foundation Course will have compulsory 75% attendance. This will be certified by the Dean of the college.
- 9.1.10 The Foundation Course will be organized by the Coordinator appointed by the Dean of the college and will be under supervision of the heads of the preclinical departments.
- 9.1.11 Every college must arrange for a meeting with parents and their wards.

#### 9.2. Early Clinical Exposure

9.2.1 Objectives: The objectives of early clinical exposure of the first-year medical learners are to enable the learner to: (a) Recognize the relevance of basic sciences in diagnosis, patient care and treatment, (b) Provide a context that will enhance basic science learning, (c) Relate to experience of patients as a motivation to learn, (d) Recognize

attitude, ethics and professionalism as integral to the doctor-patient relationship, (e) Understand the socio-cultural context of disease through the study of humanities.

#### 9.2.2 Elements

- (a) Basic science correlation: i.e. apply and correlate principles of basic sciences as they relate to the care of the patient (this will be part of integrated modules).
- (b) Clinical skills: to include basic skills in interviewing patients, doctor-patient communication, ethics and professionalism, critical thinking and analysis and self-learning (this training will be imparted in the time allotted for early clinical exposure).
- (c) Humanities: To introduce learners to a broader understanding of the socio-economic framework and cultural context within which health is delivered through the study of humanities and social sciences.

### 9.3. Electives

- 9.3.1 Objectives: To provide the learner with opportunities: (a) For diverse learning experiences, (b) To do research/community projects that will stimulate enquiry, self-directed, experiential learning and lateral thinking.
- 9.3.2 Two months are designated for elective rotations after completion of the examination at end of the third MBBS Part I and before commencement of third MBBS Part II.
- 9.3.3 It is mandatory for learners to do an elective. The elective time should not be used to make up for missed clinical postings, shortage of attendance or other purposes.
- 9.3.4 Structure (a) The learner shall rotate through two elective blocks of 04 weeks each. (b) Block 1 shall be done in a pre-selected preclinical or para-clinical or other basic sciences laboratory OR under a researcher in an ongoing research project.

During the electives regular clinical postings shall continue. (c) Block 2 shall be done in a clinical department (including specialties, super-specialties, ICUs, blood bank and casualty) from a list of electives developed and available in the institution.

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as a supervised learning experience at a rural or urban community clinic. (d) Institutions will pre-determine the number and nature of electives, names of the supervisors, and the number of learners in each elective based on the local conditions, available resources and faculty.

- 9.3.5 Each institution will develop its own mechanism for allocation of electives.
- 9.3.6 It is preferable that elective choices are made available to the learners in the beginning of the academic year.
- 9.3.7 The learner must submit a learning log book based on both blocks of the elective.
- 9.3.8 75% attendance in the electives and submission of log book maintained during elective is required for eligibility to appear in the final MBBS examination.
- 9.3.9 Institutions may use part of this time for strengthening basic skill certification.

# 9.4. Professional Development including Attitude, Ethics and Communication Module (AETCOM)

- 9.4.1 Objectives of the programme: At the end of the programme, the learner must demonstrate ability to: (a) understand and apply principles of bioethics and law as they apply to medical practice and researcunderstand and apply the principles of clinical reasoning as they apply to the care of the patients, (b) understand and apply the principles of system based care as they relate to the care of the patient, (c) understand and apply empathy and other human values to the care of the patient, (d) communicate effectively with patients, families, colleagues and other health care professionals, (e) understand the strengths and limitations of alternative systems of medicine, (f) respond to events and issues in a professional, considerate and humane fashion, (g) translate learning from the humanities in order to further his / her professional and personal growth.
- 9.4.2 Learning experiences: (a) This will be a longitudinal programme spread across the continuum of the MBBS programme including internship, (b) Learning experiences may include small group discussions, patient care scenarios, workshop, seminars, role plays, lectures etc. (c) Attitude, Ethics &Communication Module (AETCOM module) developed by Medical Council of India should be used longitudinally for purposes of instruction.

- 9.4.3 75% attendance in Professional Development Programme (AETCOM Module) is required for eligibility to appear for final examination in each professional year.
- 9.4.4 Internal Assessment will include: (a) Written tests comprising of short notes and creative writing experiences, (b) OSCE based clinical scenarios / viva voce.
- 9.4.5 At least one question in each paper of the clinical specialties in the University examination should test knowledge competencies acquired during the professional development programme.
- 9.4.6 Skill competencies acquired during the Professional Development Programme must be tested during the clinical, practical and viva voce.

### 9.5. Learner-doctor method of clinical training (Clinical Clerkship)

**9.5.1 Goal:** To provide learners with experience in: (a) Longitudinal patient care, (b) Being part of the health care team, (c) Hands-on care of patients in outpatient and inpatient setting.

#### 9.5.2 Structure:

- (a) The first clinical posting in second professional shall orient learners to the patient, their roles and the specialty.
- (b) The learner-doctor programme will progress as outlined in Table 9.
- (c) The learner will function as a part of the health care team with the following responsibilities: (i) Be part of the unit's outpatient services on admission days, (ii) Remain with the admission unit until 6 PM except during designated class hours, (iii) Be assigned patients admitted during each admission day for whom he/she will undertake responsibility, under the supervision of a senior resident or faculty member, (iv) Participate in the unit rounds on its admission day and will present the assigned patients to the supervising physician, (v) Follow the patient's progress throughout the hospital stay until discharge, (vi) Participate, under supervision, in procedures, surgeries, deliveries etc. of assigned patients (according to responsibilities outlined in table 9), (vii) Participate in unit rounds on at least one other day of the week excluding the admission day, (viii) Discuss ethical and other humanitarian issues during unit rounds, (ix) Attend

all scheduled classes and educational activities, (x) Document his/her observations in a prescribed log book / case record.

- (d) No learner will be given independent charge of the patient
- (e) The supervising physician will be responsible for all patient care decisions

#### 9.5.3 Assessment:

- (a) A designated faculty member in each unit will coordinate and facilitate the activities of the learner, monitor progress, provide feedback and review the log book/ case record.
- (b) The log book/ case record must include the written case record prepared by the learner including relevant investigations, treatment and its rationale, hospital course, family and patient discussions, discharge summary etc.
- (c) The log book should also include records of outpatients assigned. Submission of the log book/ case record to the department is required for eligibility to appear for the final examination

## Integration and Alignment in teaching and learning :

As per the new curriculum to ensure that the learner attains the broad outcomes of Integration & Alignment in the curriculum, teaching topics that are similar together reducing redundancy and allowing the learner to integrate the concept will be done under Integration and Aligning the teaching of subject material that occurs under a particular organ system/ disease concept from the same phase in the same time frame i.e, temporal coordination shall be done in respective subjects.

Sharing of topics or correlation of topics by using an integration or linker session shall be in a small proportion - not to exceed 20% of the total curriculum .The integration session preferably will be a case based discussion in an appropriate format ensuring that elements in the same phase (horizontal) and from other phases are addressed. As much as possible the necessary correlates from other phases must also be introduced while discussing a topic in a given subject - Nesting Topics that cannot be aligned and integrated must be provided adequate time in the curriculum throughout the year .

The above content is sited from Curriculum Implementation Support Program of the Competency Based Undergraduate Medical Education Curriculum, 2019, Relevant Extract from GMR, pp65-66

Details of the course contents, schedule of Teaching –Learning, hours allotted for subjects etc are as follows:

## **TABLE :3** Foundation course

Subjects / Contents	Teaching	Self directed	Total hours
	hours	learning (hours)	
Orientation <sup>1</sup>	30	0	30
Skills module <sup>2</sup>	35	0	35
Field visit to community health centre	8	0	8
Introduction to professional	-	-	10
development & AETCOM module			
Sports and extracurricular activities	22	0	22
Enhancement of language / Computer	50	0	50
skills <sup>3</sup>			
	-	-	155

- 1. Orientation course will be completed as single block in the first week and will contain elements outlined in 9.1.
- 2. Skills modules will contain elements outline in 9.1.
- 3. Based on perceived need of learners, one may choose language enhancement (English or local spoken or both) and computer skills. This should be provided longitudinally through the duration of the foundation course.
- 4. Teaching of foundation course will be organized by preclinical departments.

Table:4First Professional teaching hours

Subjects	Lecture hours	Small group teaching / tutorials / integrated learning/ practical (hours)	Self directed learning (hours)	Total (hours)
Human anatomy	220	415	40	675
Physiology *	160	310	25	495
Biochemistry	80	150	20	250
Early clinical exposure	90	-	0	90
Community Medicine **	20	27	5	52
Attitude, Ethics & Communication module (AETCOM)***	-	26	8	34
Sports and extracurricular activities	-	-	-	60
Formative assessment and term examinations	-	-	-	80
Total	-	-	-	1736

\*Including Molecular biology

\*\*Early clinical exposure hours to be divided equally in all three subjects

\*\*\*AETCOM module shall be a longitudinal programme

## **Table:5 Second professional teaching hours**

Subjects	Lecture hours	Small group teaching / tutorials / integrated learning / practical	Clinical Postings	Self directed learning (hours)	Total (hours)
		(hours)			

Pathology	80	138	-	12	230
Pharmacology	80	138	-	12	230
Microbiology	70	110	-	10	190
Community Medicine	20	30	-	10	60
Forensic Medicine and Toxicology	15	30	-	5	50
Clinical Subjects	75**	-	540***		615
Attitude, Ethics & Communication module (AETCOM)***	-	29	-	8	37
Sports and extracurricular activities	-	-	-	28	25
Total	-	-	-	-	1440

At least 3 hours of clinical instruction each week must be allotted to training in clinical and procedural skill laboratories hours maybe distributed weekly or as a block in each posting based on institutional logistics.

\*\*25 hours each for General Medicine, General Surgery and Obstetrics & Gynecology

\*\*\*The clinical postings in the second professional shall be 15 hours per week (3 hrs per day from Monday to Friday ).

Subjects	Lecture hours	Small group teaching / tutorials / integrated learning / practical (hours)	Self directed learning (hours)	Total (hours)
General Medicine	25	35	5	65
General Surgery	25	35	5	65
OBG	25	35	5	65
Pediatrics	20	30	5	55
Orthopedics	15	20	5	40
Forensic Medicine & Toxicology	25	45	5	75
Community Medicine	40	60	5	105
Dermatology	20	5	5	30
Psychiatry	25	10	5	40
Respiratory Medicine	10	8	5	20
Otorhinolaryngology	25	40	5	70
Ophthalmology	30	60	10	100
Radiodiagnosis and Radiotherapy	10	8	2	20
Anesthesiology	8	10	2	20
Clinical Postings *	-	-	-	756
Attitude, Ethics &		19	06	25
Communication module				
(AETCOM)				
Total	303	401	66	1551

Table 6: Third Professional part I teaching hours

\*The clinical postings in the third professional part 1 shall be 18 hours per week (3hrs per day from Monday to Saturday).

**Table 7: Third Professional Part II teaching hours** 

Subjects	Lecture	Small group teaching /	Self directed	Total
	hours	tutorials / integrated	learning	(hours)
		learning / practical (hours)	(hours)	
General Medicine	70	125	15	210
General Surgery	70	125	15	210
OBG	70	125	15	210
Pediatrics	20	35	10	65
Orthopedics	20	25	5	50
Clinical Postings *				792
Attitude, Ethics &	28		16	43
Communication module				
(AETCOM)				
Electives				200
Total	250	435	60	1780

\*25% of allotted time of third professional shall be utilized for integrated learning with preand para clinical subjects and shall be assessed during the clinical subjects examination. This allotted time will be utilized as integrated teaching by para clinical subjects with clinical subjects (as clinical pathology, clinical pharmacology and Clinical microbiology) \*\*the clinical postings in the third professional Part II shall be 18 hours per week (3hrs per day from Monday to Saturday)

\*\*\*hours from clinical postings can also be used for AETCOM modules

## Table 8: Clinical postings

Subjects	Period of training in weeks			
	II MBBS	III MBBS	III MBBS Part II	Total
		part I		Weeks
Electives	-	-	8*(4 regular clinical	4
			posting)	
General Medicine <sup>1</sup>	4	4	8+4	20
General Surgery	4	4	8+4	20
OBG <sup>2</sup>	4	4	8+4	20
Pediatrics	2	4	4	10
Community Medicine	4	6	-	10
Orthopedics – Including Trauma <sup>3</sup>	2	4	2	8
Otorhinolaryngology	4	4	-	8
Ophthalmology	4	4	-	8
Respiratory Medicine	2	-	-	2
Psychiatry	2	2	-	4
Radio diagnosis <sup>4</sup>	2	-	-	2
Dermatology, Venereology &	2	2	2	6
Leprosy				
Dentistry & Anaesthesia	-	2	-	2
Casualty	-	2	-	2
	36	42	48	126

\*In four of the eight weeks of electives, regular clinical postings shall be accommodated.

Clinical postings may be adjusted within the time framework.

<sup>1</sup>This posting includes laboratory medicine (para-clinical) & infections diseases (phase III part I).

<sup>2</sup>This includes maternity training and family welfare (including family planning).

<sup>3</sup>This posting includes physical medicine and rehabilitation.

<sup>4</sup>This posting includes radiotherapy, wherever available.

### Table 9: Learner – Doctor programme (clinical clerkship)

Year of Curriculum	Fogue of loornor doctor programma
real of Curriculum	Focus of learner – doctor programme
Year 1	Introduction to hospital environment. Early clinical exposure.
	Understanding perspectives of illness
Year 2	History taking, Physical examination. Assessment of change in
	clinical status, communication and patient education
Year 3	All of the above and choice of investigations, basic procedures
	and continuity of care
Year 4	All of the above and decision making, management and outcomes

## Scheme of Examination

## **Internal Assessment**

It shall be based on day today assessments, evaluation of assignment, presentation of seminar, clinical a Clinical presentation, problem solving exercises participation inproject for health care in the community, proficiency in carrying out small research project tests etc. Regular periodic examinations should be conducted throughout the course. Although the question of number of examinations left to the institution, there should be a minimum of at least three (3) sessional examinations during the course. One of these tests can be in the form of MCQS. One of the practical/clinical examination can be in the form of OSPE/OSCE. Average of best two examination marks should be taken into consideration while calculating the marks of the internal assessment..

- There shall be no less than three internal assessment examinations in each Preclinical / Paraclinical subject and no less than two examinations in each clinical subject in a professional year. An end of posting clinical assessment shall be conducted for each clinical posting in each professional year.
- 2. In subjects that are taught at more than one phase, proportionate weightage must be given for internal assessment for each Phase. For example, General Medicine must be assessed in second Professional, third Professional Part I and third Professional Part II, independently.

## **Components of IA**

- i) Theory IA can include: theory tests, send ups, seminars, quizzes, interest in subject, scientific attitude etc. Written tests should have short notes and creative writing experiences.
- Practical/Clinical IA can include: practical/clinical tests, Objective Structured Clinical Examination (OSCE)/Objective Structured Practical Examination (OSPE), Directly Observed Procedural Skills (DOPS), Mini Clinical Evaluation
- iii) Exercise (mini-CEX), records maintenance and attitudinal assessment.

This content is cited from :Medical Council of India. Competency Based Assessment Module for Undergraduate Medical Education Training program, 2019: pp 10-12

Day to day records and log book including certification of required skills should be given importance in internal assessment. Internal assessment should be based on competencies and skills.

The final internal assessment in a broad clinical specialty (e.g., Surgery and allied specialties etc.) shall comprise of marks from all the constituent specialties. The proportion of the marks for each constituent specialty shall be determined by the time of instruction allotted to each.

Learners must secure at least 50% marks of the total marks (combined in theory and practicals / clinicals) ;not less than 40%marks in theory and practical/clinical seperately) assigned for internal assessment in a particular subject in order to be eligible for appearing final University Examinations of that subject declared successful at the final University examination of that subject. The learner should be made aware of the results of Internal Assessment. The college has to build its own mechanism and the calendar of the college should show the details regarding conduct of Internal assessment. Internal assessment marks will reflect as separate head of passing at the summative examination.

This content is based on the MCI Document. GMR 2019 page 83 11.1.1b5

The results of internal assessment should be displayed on the notice board within a 1-2 weeks of the test. Universities shall guide the colleges regarding formulating policies for remedial measures for students who are either not able to score qualifying marks or have missed on some assessments due to any reason.

 Learners must have completed the required certifiable competencies for that phase of training and completed the log book appropriate for that phase of training to be eligible for appearing at the final university examination of that subject. GMR 2019 page 83 11.1.1b6 &7.

Proper record of the work should be maintained, which will be the basis of internal assessment of all students and should be available for scrutiny.

Weightage for internal assessment shall be 20% of total marks in the subject. A student must secure at least 35% of total marks fixed for internal assessment in a particular subject in order to be eligible to appear in the University Examination of that subject. (Vide Medical Council of India Notification on Graduate Medical Education (Amendment.) Regulations 2003, published in the Gazette of India Part III, Section 4. Extraordinary issued on 15<sup>th</sup> October 2003.)

Suggested pattern f the Internal Assessment shall be based on the directives received from MCI Competency Based Assessment Module for Undergraduate Medical Education Training Program, 2019.

Phase	Minimum Number of tests during the year	Remarks
1 st	Human Anatomy 3, Physiology 3, Biochemistry 3, Community Medicine 1	ECE assessment should be included subject-wise There should be at least one short question from AETCOM in each subject One of the 3 tests in preclinical subjects should be prelim or pre-university examination.
2 <sup>nd</sup>	Pathology 3, Pharmacology 3, Microbiology 3, Two tests for- General Medicine (Including Psychiatry, Dermatology, Venereology & Leprosy (DVL) and Respiratory Medicine including Tuberculosis), General Surgery (Including Orthopaedics, Dentistry, Anaesthesiology and Radiodiagnosis), Obstetrics& Gynaecology, Forensic Medicine & Toxicology and Community Medicine End of posting (EOP) examination at each clinical posting including those of allied subjects	<ul> <li>Clinical subjects should also be assessed at end of each posting (EOP) – Theory and Practical</li> <li>There should be at least one short question from AETCOM in each subject</li> <li>One of the 3 tests in Paraclinical subjects should be prelim or pre-university examination.</li> </ul>
3rd	Forensic Medicine & Toxicology 2, Community Medicine 2 Ophthalmology 2, Otorhinolaryngology 2, Two tests for- General Medicine (Including Psychiatry, Dermatology, Venereology & Leprosy (DVL) and Respiratory Medicine including Tuberculosis), General Surgery (Including Orthopaedics, Anaesthesiology and Radiodiagnosis), Pediatrics, Obstetrics &Gynaecology EOP examination at each clinical posting including allied subjects	<ul> <li>Clinical subjects should also be tested at end of each posting (EOP)-Theory and Practical</li> <li>There should be at least one short question from AETCOM in each subject</li> <li>One of the tests in Ophthalmology, Otorhinolaryngology /Forensic Medicine &amp;Toxicology/ Community Medicine should be prelim or</li> </ul>

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		pre-university examination
4 <sup>th</sup>	Two Tests for - General Medicine (Including Psychiatry, Dermatology, Venereology & Leprosy (DVL) and Respiratory Medicine including Tuberculosis),General Surgery (Including Orthopaedics, Anaesthesiology and Radiodiagnosis), Pediatrics, Obstetrics & Gynaecology EOP examination at each clinical posting including that in allied subjects	<ul> <li>Clinical subjects should also be tested at end of each posting (EOP) -Theory and Practical</li> <li>There should be at least one short question from AETCOM in each subject</li> <li>One of the tests in Medicine, Surgery, Pediatrics and Obstetrics &amp; Gynaecology should be prelim or preuniversity examination</li> <li>Assessment of electives to be included in IA</li> </ul>

This content is cited from: Medical Council of India, Competency Based Assessment Module for Undergraduate Medical Education Training program, 2019: Annexure I pp 24-25

Internal assessment conduction should involve all the faculty members of the department including Senior Residents. .Competency based Assessment requires focus on learning process and outcomes including psychomotor, communication and affective domains.Involvement of all the teaching faculty and Senior Residents helps in building ownership of teaching –learning methods and assessment as well.

Designing of IA needs adequate planning and blue printing to include all the domains of competency.

The IA of broader specialties should also include marks from all the allied specialties e.g. General Medicine should include marks of Psychiatry, Dermatology, Venereology & Leprosy and Respiratory Medicine including tuberculosis etc. while General Surgery should include Orthopaedics, Dentistry, Anaesthesiology and Radio-diagnosis etc, so that students do not ignore these postings. The proportion of the marks for each allied specialty shall be proportionate to the time of instruction allotted to each postings. When subjects are taught in

Regulations Governing MBBS Degree Course

more than one phase - the assessment mustbe done in each phase and must contribute proportionally to final internal assessment.

Assessment of Foundation Course should be included in formative assessment of first phase. Assessment of Early Clinical Exposure should be included in formative as well as in internal assessment in first phase subject-wise.Assessment of electives should contribute to internal assessment in final phase part-II.

*There should be at least one assessment based on direct observation of skills, attitudes and communication at all levels.* Communication and attitudinal assessment should also be built in all assessments as far as possible. A log book must be used to record these components.

## Feedback in IA

Feedback should be provided to students throughout the course so that they are aware of their performance and remedial action can be initiated well in time. The feedbacks need to be structured and the faculty and students must be sensitized to giving and receiving feedback. The results of IA should be displayed on notice board within 2 weeks of the test and an opportunity provided to the students to discuss the results and get feedback on making their performance better. Universities should guide the colleges regarding formulating policies for remedial measures for students who are either not able to score qualifying marks or have missed on some assessments due to any reason(s).

It is also recommended that students should sign with date whenever they are shown IA records in token of having seen and discussed the marks. Internal assessment marks will not be added to University examination marks and will reflect as a separate head of passing at the summative examination.

#### **Record keeping**

The peculiarities of CBA, particularly its longitudinal nature and its use as a measure of progression, require a good record keeping. Such records can vary from manual to electronic.In whatever form they are used, the essential features should include regularity, availability to the students and a documentation of discussion of results (present status, feedback and suggestions for improvement) between the student and the teacher(s). Many

aspects can be covered in a group feedback while some will require one to one discussion. The formats for use in Indian settings have been published and can be suitably modified for local use.

This content is cited from: Medical Council of India. Competency Based Assessment Module for Undergraduate Medical Education Training program, 2019: pp 10-14

A candidate who has not secured requisite aggregate in the internal assessment may be provisionally permitted to appear for university examination. However, he/she has to successfully complete the remediation measures prescribed by the institution/ university as the case may be, prior to the declaration of his/her results in that particular phase. Failure to meet prescribed 50% marks in Internal assessment after availing remedial measures will lead to annulment of the results of the candidate in that particular subject (s) in the university examination.

This content is based on the MCI Document, Curriculum Implementation Support Program of the Competency Based Undergraduate Medical Education Curriculum 2019, extract of the Salient features of Graduate Medical Education Regulations 2019, page number 88-91.

Internal assessment shall be based on day-to-day assessment. It shall relate to different ways in which learners participate in learning process including assignments, preparation for seminar, clinical case presentation, preparation of clinical case for discussion, clinical case study/problem solving exercise, participation in project for health care in the community, proficiency in carrying out a practical or a skill in small research project, a written test etc.

- Regular periodic examinations shall be conducted throughout the course. There shall be no less than three internal assessment examinations in each Preclinical / Paraclinical subject and no less than two examinations in each clinical subject in a professional year. An end of posting clinical assessment shall be conducted for each clinical posting in each professional year.
- In subjects that are taught at more than one phase, proportionate weightage must be given for internal assessment for each Phase. For example, General Medicine must be assessed in second Professional, third Professional Part I and third Professional Part II, independently.

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- 3. Day to day records and log book should be given importance in internal assessment.Internal assessment should be based on competencies and skills. Learners must secure at least 50% marks of the total marks (combined in theory and practicals / clinicals) assigned for internal assessment in a particular subject in order to be declared successful at the final University examination of that subject. The learner should be made aware of the results of Internal Assessment. Each college can build itsown mechanism and the calendar of the college should show the details regarding conduct of Internal assessment. Internal assessment marks will reflect as separate head of passing at the summative examination.
- 4. A candidate who has not secured requisite aggregate in the internal assessment may be provisionally permitted to appear for university examination. However, he/she has to successfully complete the remediation measures prescribed by the institution university as the case may be, prior to the declaration of his/her results in that particular phase. Failure to meet prescribed 50% marks in Internal assessment after availing remedial measures will lead to annulment of the results of the candidate in that particular subject (s) in the university examination.

**UNIVERSITY EXAMINATIONS** (As per GMER 2019 clause no 11.2 and its subclauses pages 83-84)

- 11.2.1 University examinations are to be designed with a view to ascertain whether the candidate has acquired the necessary knowledge, minimal level of skills, ethical and professional values with clear concepts of the fundamentals which are necessary for him/her to function effectively and appropriately as a physician offirst contact. Assessment shall be carried out on an objective basis to the extent possible.
- 11.2.2 Nature of questions will include different types such as structured essays (Long Answer Questions LAQ), Short Answers Questions (SAQ) and objective type questions (e.g. Multiple Choice Questions MCQ). Marks for each part should be indicated separately. MCQs shall be accorded a weightage of not more than 20% of the total theory marks. In subjects that have two papers, the learner must secure at least 40% marks in each of the papers with minimum 50% of marks inaggregate (both papers together) to pass.

11.2.3 Practical/clinical examinations will be conducted in the laboratories or hospitalwards. The objective will be to assess proficiency and skills to conduct experiments, interpret *Regulations Governing MBBS Degree Course* 

BLDE (Deemed to be University)

data and form logical conclusion. Clinical cases kept in the examination must be common conditions that the learner may encounter as a physician of first contact in the community. Selection of rare syndromes and disorders as examination cases is to be discouraged. Emphasis should be on candidate's capability to elicit history, demonstrate physical signs, write a case record, analyze the case and develop a management plan.

- 11.2.4 Viva/oral examination should assess approach to patient management, emergencies, attitudinal, ethical and professional values. Candidate's skill in interpretation of common investigative data, X rays, identification of specimens,ECG, etc. is to be also assessed.
- 11.2.5 There shall be one main examination in an academic year and a supplementary to be held not later than 90 days after the declaration of the results of the main examination.
- 11.2.6 A learner shall not be entitled to graduate after 10 years of his/her joining of the first part of the MBBS course.
- 11.2.7 University Examinations shall be held as under:

# (a) First Professional

- 1. The first Professional examination shall be held at the end of first Professional training (1+12 months), in the subjects of Human Anatomy, Physiology and Biochemistry.
- 2. A maximum number of four permissible attempts would be available to clear the first Professional University examination, whereby the first Professional course will have to be cleared within 4 years of admission to the said course. Partial attendance at any University examination shall be counted as an availed attempt.

# (b) Second Professional

1. The second Professional examination shall be held at the end of second professional training (11 months), in the subjects of Pathology, Microbiology, and Pharmacology.

# (c) Third Professional

 Third Professional Part I shall be held at end of third Professional part 1 of training (12 months) in the subjects of Ophthalmology, Otorhinolaryngology, Community

Medicine and Forensic Medicine and Toxicology

- 2. Third Professional Part II (Final Professional) examination shall be at the end of training(14 months including 2 months of electives) in the subjects of General Medicine, General Surgery, Obstetrics & Gynaecology and Pediatrics. The discipline of Orthopaedics, Anaesthesiology, Dentistry and Radiodiagnosis will constitute 25% of the total theory marks incorporated as a separate section in paper II of General Surgery.
- The discipline of Psychiatry and Dermatology, Venereology and Leprosy(DVL), Respiratory Medicine including Tuberculosis will constitute 25% of the total theory marks in General Medicine incorporated as a separate section in paper II of General Medicine

Phase of Course	Written- Theory- Total	Practiculor Orals/ Clinicals	Pass Criteria
First Professional	10		
Human Anatomy - 2 papers	200	-0.00	
Physiology - 2 papers	200	200	
Blochemiany 2 papers	200	100	
Second Professional	1.000		Internal Assessment:
Pharmacology - 2 papers	200	100	35% separately is theory and
Pathology 2 papers	200	100	practical far eligibility to
Mirrobiology - 2papers	200	100	appear for University
Third Professional Part - 1			Experioretions
Forensie Medicine & Toosenlogy - 1 paper	100	-100	University Examination
Ophthalmology - 1 paper	100	100	Mandatory 50% marks in
Otorhinolaryngology - 1 paper	100	100	theory and practical
Community Medicine - 2 papers	200	100	(practical + practical/ clinical +
Third Professional Part - II	the second second	10.00	vival
General Medicine - 2 papers -	200	200	
General Surgery - 2 papers	200	200	
Pediatrics - 1 paper	100	100	
Obstatues & Gynaecology 2 papers	200	200	

Chart depicting the break up of marks for the University Examinations, Minimum marks to be obtained in Internal Assessment and pass criteria table no 10 page 84 of GMR 2019

Note: At least one question in each paper of the clinical specialties should test knowledge - competencies acquired during the professional development programme (AETCOM module); Skills competencies acquired during the Professional Development programme (AETCOM module) must be tested during clinical, practical and viva.

# Criteria for passing in a subject:

# [As per clause 11.2.8 GMR 2019 page 85]

A candidate shall obtain 50% marks in University conducted examination separately in Theory and Practical (practical includes: practical/ clinical and viva voce) in order to be declared as passed in that subject.

In subjects that have two papers, the learner must secure at least 40% marks in each of the papers with minimum 50% of marks in aggregate (both papers together) to pass in the said subject.

	Forensic	Ophthalmology	Oto-	Community
	medicine	opininalitions	rhinolaryngology	medicine
	&toxicology		r mnotar yngorogy	meaneme
	00	neory marks		
Derrer I			100	100
Paper I	100	100	100	100
Paper II				100
Total theory marks in	100	100	100	200
University exams				
	Practicals/	clinicals +viva –v	oce	
Practicals/clinicals	80	80	80	80
Viva-voce	20	20	20	20
Total marks inclusive of	100	100	100	100
clinicals/practicals				
+viva-voce				
	Inter	nal assessment		
Theory	20	20	20	20
Practicals/clinicals+viva-	20	20	20	20
voce				
Total	40	40	40	40

#### University examination –Subjects and marks phase III/I

University examination -Subjects aand marks phase III/II

	General	General	Pediatrics	<b>Obstetrics &amp;</b>
	Medicine	Surgery		Gynecology
		Theory mark	KS	
Paper I	100	100	100	100
Paper II	100	100		100
Total theory marks in	200	200	100	200
University exams				
		Clinicals+viva	-voce	
Clinicals	160	160	80	160
Viva-voce	40	40	20	40
Total marks in	200	200	100	200

clinicals +viva- voce in University exams					
		Internal ass	essment		
Theory	40	40	20	40	
Clinicals +	40	40	20	40	
viva-voce					
Total IA	80	80	40	80	

University examination Question paper pattern:

(Applicable to General Medicine, General Surgery & OBGY) Total Marks: 200

(Pediatrics 1 paper Total marks: 100)

# For paper I

Type of Questions	Number of questions	Marks for each	Total
		question	marks
(MCQS	20	1 (ONE)	20
Essay type questions	2	10	20
Short Essay types questions	6	5	30
Short Answers	10	3	30
Total			100

# For paper II

Type of Questions	Number of	Marks for each	Total
	questions	question	marks
MCQs	20	01	20
Long Essay type questions	2	10	20
Short Essay types questions	6	5	30
Short Answer questions	10	3	30
			100

# Paper II Section I

Type of Questions	Number of	Marks for each	Total
	questions	question	marks
MCQs	10	01	10
Long Essay type questions	1	10	10
Short Essay types questions	3	5	15
Short Answer questions	5	3	15
			50

**Paper II Section II** 

(Allied subjects of Medicine : Dermatology, Psychiatry, Respiratory Medicine) (Allied Subjects of Surgery: Orthopedics, Anaesthesiology, Radiology & Dentistry) Weightage for each subject shall be proportionate to allotatted teaching hours

Type of Questions	Number of questions	Marks for each question	Total marks
MCQs	10	01	10
Long Essay type questions	1	10	10
Short Essay types questions	3	5	15
Short Answer questions	5	3	15
			50

Clinical /practical examinations shall be conducted as per University /NMC norms of CBME curriculum. The division of the clinical/practical marks are described in detail in the concerned subject wise curricula. The total practical/clinical marks shall be as per the NMC norms.

# 8. SUBMISSION OF CLINICAL POSTINGS RECORD NOTE BOOK

Each candidate shall submit to the Examiners his/her clinical postings notebook duly certified by the Head of the Department as a bonafide record of the work done by the candidate at the time of Practical/Clinical Examination.

After fulfilling the requisite criteria in Internal Assessment and Attendance, the candidate, must obtain 50% marks in aggregate with a minimum of 50% marks in Theory minimum of 50% marks in Practical / Clinical + viva voce seperately in each of the subjects. In subjects having two theory papers the candidate should secure minimum 40% of marks and 50% together to be declared as pass.

A candidate not securing 50% marks in aggregate in Theory or Practical/Clinical examination in a subject shall be declared to have failed in that subject and is required to appear for both theory and Practical/Clinical again in the subsequent examination in that subject.

# **10. DECLARATION OF CLASS:**

 a) A candidate having appeared in all the subjects in the same examination and passed that examination in the first attempt and secures 75% of marks or more of grand total marks prescribed will be declared to have passed the examination with distinction.

- b) A candidate having appeared in all the subjects in the same examination and passed that examination in the first attempt and secures 65% of marks or more but less than 75% of grand total marks prescribed will be declared to have passed the examination in First Class.
- c) A candidate having appeared in all the subjects in the same examination and passed that examination in the first attempt and secures 50% of marks or more but less than 65% of grand total marks prescribed will be declared to have passed the examination in Second Class.
- d) A candidate passing the university examination in more than one attempt shall be placed in Pass class irrespective of the percentage of marks secured by him/her in the examination.

[Please note fraction of marks should not be rounded off for clauses (a), (b) and (c)]

# **11. MIGRATION**

Rules regarding migration of the student from one institutation other institution shall be as per the MCI/NMC norms as applicable.

# Note III:

Only candidates who pass in all the Phase I (Pre Clinical) subjects shall be eligible to join the Phase II of the course.

A learner, who fails in the second Professional examination, shall not be allowed to appear in third Professional Part I examination unless she/he passes all subjects of second Professional examination.

Passing in third Professional (Part I) examination is not compulsory before starting part II training; however, passing of third Professional (Part I) is compulsory for being eligible to appear for third Professional (Part II) examination.

Second professional clinical postings shall commence before / after declaration of results of the first professional phase examinations, as decided by the institution/ University. Third Professional parts I and part II clinical postings shall start no later than two weeks after the completion of the previous professional examination.



## BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA GENERAL MEDICINE CURRICULUM

#### Goal:

The undergraduate medical education program is designed with a goal to create an "Indian Medical Graduate" (IMG) possessing requisite knowledge, skills, attitudes, values and responsiveness, so that she or he may function appropriately and effectively as a physician of first contact of the community while being globally relevant.

#### **Objectives:**

- a) be competent in diagnosis and management of common health problems of the individual and the community, commensurate with his/her position as a member of the health team at the primary, secondary or tertiary levels, using his/her clinical skills based on history, physical examination and relevant investigations.
- b) be competent to practice preventive, promotive, curative and rehabilitative medicine in respect to the commonly encountered health problems.
- c) appreciate rationale for different therapeutic modalities, be familiar with the administration of the "essential drugs" and their common side effects.
- d) be able to appreciate the socio-psychological, cultural, economic and environmental factors affecting health and develop humane attitude towards the patients in discharging one's professional responsibilities.

SI.	IM No.	Торіс	
No.			
		Topic: Heart Failure	
	IM1.1	Describe and discuss the epidemiology, pathogenesis clinical evolution and course of common causes of heart disease including:rheumatic/ valvular, ischemic, hypertrophic inflammatory	TH
	IM1.2	Describe and discuss the genetic basis of some forms of heartfailure	TH
	IM1.3	Describe and discuss the aetiology microbiology pathogenies andclinical evolution of rheumatic fever, criteria, degree of rheumatic activity and rheumatic valvular heart disease and its complications including infective endocarditis	TH
	IM1.4	Stage heart failure	TH
	IM1.5	Describe ,discuss and differentiate the processes involved in R Vs Lheart failure, systolic vs diastolic failure	TH
	IM1.6	Describe and discuss the compensatory mechanisms involved inheart failure including cardiac remodelling and neurohormonal adaptations	TH
	IM1.8	Describe and discuss the pathogenesis and development of common arrythmias involved in heart failure particularly atrial fibrillation	TH

# Course content with competency numbers both for theory and practicals

	Describe and discuss the clinical presentation and features,	
IM1.9	diagnosis, recognition and management of acute rheumatic fever	TH
	Describe, prescribe and communicate non pharmacologic	111
IM1.23	management of heart failure including sodium restriction,	TH
1111.23	physical activity and limitations	111
	Describe and discuss the pharmacology of drugs including	
	indications, contraindications in the management of heart	
IM1.24	failureincluding diuretics, ACE inhibitors, Beta blockers,	TH
	aldosterone antagonists and cardiac glycosides	
	Topic: Acute Myocardial Infarction/ IHD	
	Discuss the aetiology of risk factors both modifiable	
IM2.2	and non-modifiable of atherosclerosis and IHD	TH
	Discuss and describe the lipid cycle and the role of	
IM2.3	dyslipidemia in the pathogenesis of atherosclerosis	TH
D (2 )	Discuss and describe the pathogenesis natural history,	
IM2.4	evolution and complications of atherosclerosis and IHD	
D (2 5	Define the various acute coronary syndromes and describe	
IM2.5	their evolution, natural history and outcomes	TH
	Discuss and describe the medications used in patients	
IM2.15	with anacute coronary syndrome based on the clinical	TH
	presentation	
IM2.16	Discuss and describe the indications for acute thrombolysis,	TH
1112.10	PTCA and CABG	111
	Discuss and describe the indications, formulations, doses,	
IM2.18	sideeffects and monitoring for drugs used in the	TH
	management of dyslipidemia	
	Discuss and describe the pathogenesis, recognition and	
IM2.19	management of complications of acute coronary syndromes	TH
	including arrhythmias, shock, LV dysfunction, papillary	
	musclerupture and pericarditisDescribe and discuss the indications for nitrates, anti platelet	
IM2.23	agents, gp II b III a inhibitors, beta blockers, ACE inhibitors	TH
11712.23	etc in themanagement of coronary syndromes	111
	Define, discuss, describe and distinguish community	
IM3.1	acquired pneumonia, nosocomial pneumonia and	TH
	aspiration pneumonia	111
n th t	Discuss and describe the pathophysiology and	
IM4.6	manifestations of malaria	TH
	Describe and discuss the pharmacology, indications, adverse	
IM4.22	reactions, interactions of antimalarial drugs and basis of	TH
	resistance	
	Topic: Liver Disease	
IM5.2	Describe and discuss the aetiology and pathophysiology of	TH
	liverinjury	
IM5.3	Describe and discuss the pathologic changes in various	TH

	forms ofliver disease	
IM5.6	Describe and discuss the pathophysiology, clinical evolution and complications of cirrhosis and portal hypertension including ascites, spontaneous bacterial peritonitis, hepatorenal syndrome and hepatic encephalopathy	TH
IM5.7	Enumerate and describe the causes and pathophysiology of drug induced liver injury	TH
IM5.8	Describe and discuss the pathophysiology, clinical evolution and complications cholelithiasis and cholecystitis	TH
IM5.16	Describe and discuss the management of hepatitis, cirrhosis, portal hypertension, ascites spontaneous, bacterial peritonitis and hepaticencephalopathy	TH
	Topic: HIV	
IM6.1	Describe and discuss the symptoms and signs of acute HIV seroconversion	TH
IM6.2	Define and classify HIV AIDS based on the CDC criteria	TH
IM6.3	Describe and discuss the relationship between CDC count and therisk of opportunistic infections	TH
IM6.4	Describe and discuss the pathogenesis, evolution and clinical features of common HIV related opportunistic infections	TH
IM6.5	Describe and discuss the pathogenesis, evolution and clinical features of common HIV related malignancies	TH
IM6.6	Describe and discuss the pathogenesis, evolution and clinical features of common HIV related skin and oral lesions	TH
IM6.9	Choose and interpret appropriate diagnostic tests to diagnose and classify the severity of HIV-AIDS including specific tests of HIV, CDC	TH
IM6.10	Choose and interpret appropriate diagnostic tests to diagnose opportunistic infections including CBC, sputum examination and cultures, blood cultures, stool analysis, CSF analysis and Chestradiographs	TH
IM6.13	Describe and enumerate the indications and side effects of drugsfor bacterial, viral and other types of diarrhea	TH
IM6.16	Discuss and describe the principles of HAART, the classes of antiretrovirals used, adverse reactions and interactions	TH
	Topic: Rheumatologic problems	_
IM7.1	Describe the pathophysiology of autoimmune disease	TH
IM7.2	Describe the genetic basis of autoimmune disease	TH
IM7.3	Classify cause of joint pain based on the pathophysiology	TH
IM7.4	Develop a systematic clinical approach to joint pain based on thepathophysiology	TH

IM7.5	Describe and discriminate acute, subacute and chronic causes ofjoint pain	TH
IM7.6	Discriminate, describe and discuss arthralgia from arthritis and mechanical from inflammatory causes of joint pain	TH
IM7.7	Discriminate, describe and discuss distinguishing articular fromperiarticular complaints	TH
IM7.8	Determine the potential causes of join pain based on the presenting features of joint involvement	TH
IM7.9	Describe the common signs and symptoms of articular and periarticular diseases	TH
IM7.19	Develop an appropriate treatment plan for patients with rheumatologic diseases	TH
	Topic: Acute Kidney Injury and Chronic renal failure	
IM10.3	Describe the pathophysiology and causes of pre renal ARF, renaland post renal ARF	TH
IM10.9	Describe and discuss the pathophysiology of anemia andhyperparathyroidism in CKD	TH
IM10.25	Identify and describe the priorities in the management of ARF including diet, volume management, alteration in doses of drugs, monitoring and indications for dialysis	TH
IM10.26	Describe and discuss supportive therapy in CKD including diet, antihypertensives, glycemic therapy, dyslipidemia, anemia, hyperkalemia, hyperphosphatemia and secondary hyperparathyroidism	TH
	Topic: Diabetes Mellitus	
IM11.1	Define and classify diabetes	TH
IM11.3	Describe and discuss the epidemiology and pathogenesis and riskfactors economic impact and clinical evolution of type 2 diabetes	TH
IM11.4	Describe and discuss the genetic background and the influence of the environment on diabetes	TH
IM11.5	Describe and discuss the pathogenesis and temporal evolution of microvascular and macrovascular complications of diabetes	TH
IM11.6	Describe and discuss the pathogenesis and precipitating factors, recognition and management of diabetic emergencies	TH
IM11.16	Discuss and describe the pharmacologic therapies for diabetes their indications, contraindications, adverse reactions and interactions	TH
IM11.18	Describe and discuss the pharmacology, indications, adverse reactions and interactions of drugs used in the prevention andtreatment of target organ damage and complications of Type IIDiabetes including neuropathy, nephropathy, retinopathy, hypertension, dyslipidemia and	TH

	cardiovascular disease	
IM11.22	Enumerate the causes of hypoglycaemia and describe the counterhormone response and the initial approach and treatment	TH
IM11.23	Describe the precipitating causes, pathophysiology, recognition, clinical features, diagnosis, stabilisation and management of diabetic ketoacidosis	
IM11.24	Describe the precipitating causes, pathophysiology, recognition, clinical features, diagnosis, stabilisation and management of Hyperosmolar non ketotic state	TH
IM12.1	Describe the epidemiology and pathogenesis of hypothyroidism andhyperthyroidism including the influence of iodine deficiency and autoimmunity in the pathogenesis of thyroid disease	TH
IM12.2	Describe and discuss the genetic basis of some forms of thyroiddysfunction	TH
IM12.3	Describe and discuss the physiology of the hypothalamopituitary - thyroid axis, principles of thyroid function testing and alterations inphysiologic function	TH
IM12.4	Describe and discuss the principles of radio iodine uptake in the diagnosis of thyroid disorders	TH
IM12.15	Describe and discuss the indications of thionamide therapy,	
	Topic: Common malignancies	
IM13.1	Describe the clinical epidemiology and inherited & modifiable risk factors for common malignancies in India	TH
IM13.2 IM13.3	Describe the genetic basis of selected cancers Describe the relationship between infection and cancers	TH TH
11113.5	<b>Topic:</b> Obesity	111
IM14.2	Describe and discuss the aetiology of obesity including modifiable and non-modifiable risk factors and secondary causes	TH
IM14.9	4.9 Order and interpret diagnostic tests based on the clinical diagnosisincluding blood glucose, lipids, thyroid function tests etc.	
IM14.13	Describe and enumerate the indications, pharmacology and sideeffects of pharmacotherapy for obesity	
IM14.14	Describe and enumerate the indications and side effects of bariatric surgery	TH
	Topic: GI bleeding	
IM15.1	Enumerate, describe and discuss the aetiology of upper and lowerGI bleeding	TH
IM15.2Enumerate, describe and discuss the evaluation and steps involved in stabilizing a patient who presents with acute volume loss and GI bleed		

IM15.3	Describe and discuss the physiologic effects of acute blood andvolume loss	TH		
IM15.12	Enumerate the indications for whole blood, component and platelet transfusion and describe the clinical features and management of amismatched transfusion			
IM15.14	Describe and enumerate the indications, pharmacology and sideeffects of pharmacotherapy of pressors used in the treatment of Upper GI bleed			
IM15.15	Describe and enumerate the indications, pharmacology and sideeffects of pharmacotherapy of acid peptic disease including Helicobacter pylori	TH		
	Topic: Diarrheal disorder			
IM16.3	Describe and discuss the chronic effects of diarrhea includingmalabsorption	TH		
IM16.15	Distinguish based on the clinical presentation Crohn's disease fromUlcerative Colitis	TH		
IM16.16	Describe and enumerate the indications, pharmacology and sideeffects of pharmacotherapy including immunotherapy	TH		
IM16.17	Describe and enumerate the indications for surgery in inflammatory bowel disease	TH		
	Topic: Headache			
IM17.7	Enumerate the indications and describe the findings in the CSF inpatients with meningitis	TH		
IM17.13	Describe the pharmacology, dose, adverse reactions and regimensof drugs used in the treatment of bacterial, tubercular and viral meningitis	TH		
	Topic: Cerebrovascular accident			
IM18.12	Enumerate the indications for and describe acute therapy of nonhemorrhagic stroke including the use of thrombolytic agents	TH		
IM18.13	Enumerate the indications for and describe the role of anti plateletagents in non hemorrhagic stroke	TH		
IM18.14	Describe the initial management of a hemorrhagic stroke	TH		
IM18.15	Enumerate the indications for surgery in a hemorrhagic stroke	TH		
IM18.16	Enumerate the indications describe and observe the multidisciplinary rehabilitation of patients with a CVA	TH		
	Topic: Poisoning	r		
IM21.6	Describe the medico legal aspects of suspected suicidal or homicidal poisoning and demonstrate the correct procedure to writea medico legal report on a suspected poisoning	TH		
T	opic: Mineral, Fluid Electrolyte and Acid base Disorder			
IM22.5	Enumerate the causes and describe the clinical features and the correct approach to the diagnosis and management of the patient with hyponatremia	TH		
IM22.6	Enumerate the causes and describe the clinical and laboratory features and the correct approach to the	TH		

	diagnosis and management of the patient with			
	hyponatremia			
IM22.7	diagnosis and management of the patient with			
	hypokalemia			
IM22.8	Enumerate the causes and describe the clinical and laboratoryfeatures and the correct approach to the diagnosis and management of the patient with hyperkalemia			
IM22.9	Enumerate the causes and describe the clinical and laboratory features of metabolic acidosis	TH		
IM22.10	Enumerate the causes of describe the clinical and laboratory features of metabolic alkalosis	TH		
IM22.11	Enumerate the causes and describe the clinical and laboratory features of respiratory acidosis	TH		
IM22.12	Enumerate the causes and describe the clinical and laboratoryfeatures of respiratory alkalosis	TH		
	<b>Topic:</b> Nutritional and Vitamin Deficiencies			
	Topic: Geriatrics			
IM24.3	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of acute confusional states	TH		
IM24.4	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of vascular events in the elderly			
IM24 5	Describe and discuss the aetiopathogenesis clinical presentationidentification, functional changes, acute care, stabilization, management and rehabilitation of depression in the elderly			
IM24.6	Describe and discuss the aetiopathogenesis causes, clinical presentation difference in discussion presentation			
IM24.7	Describe and discuss the aetiopathogenesis, clinical			
IM24.8	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of osteoporosis in the elderly			
IM24.9	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care,	TH		

ization, management and rehabilitation of CVA in the		
y		
Tibe and discuss the aetiopathogenesis, clinical ntation, identification, functional changes, acute care, ization, management and rehabilitation of COPD in the y	TH	
Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of the elderly undergoing surgery		
Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of degenerative joint disease		
tibe and discuss the aetiopathogenesis, clinical ntation, identification, functional changes, acute care, ization, management and rehabilitation of falls in the y	TH	
Tibe and discuss the aetiopathogenesis, clinical ntation, identification, functional changes, acute care, ization, management and rehabilitation of common ures in the elderly	TH	
Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of vision and visual loss in the elderly		
Tibe and discuss the principles of physical and social ilitation, functional assessment, role of otherapy andoccupational therapy in the gement of disability in the elderly	TH	
tibe and discuss the aetiopathogenesis, clinical ntation, identification, functional changes, acute care, ization, management and rehabilitation of hearing loss elderly	TH	
tibe and discuss the aetiopathogenesis, clinical ntation, complications, assessment and management of ional disordersin the elderly	TH	
ic: The role of the physician in the community		
ify, discuss and defend medicolegal, socio-cultural and alissues as it pertains to decision making in health care ding advanced directives and surrogate decision making	TH	
	ibe and discuss the aetiopathogenesis,clinical ntation,identification, functional changes, acute care, ization, management and rehabilitation of COPD in the y ibe and discuss the aetiopathogenesis,clinical ntation,identification, functional changes, acute care, ization, management and rehabilitation of the elderly going surgery ibe and discuss the aetiopathogenesis,clinical ntation,identification, functional changes, acute care, ization, management and rehabilitation of degenerative disease ibe and discuss the aetiopathogenesis,clinical ntation,identification, functional changes, acute care, ization, management and rehabilitation of degenerative disease ibe and discuss the aetiopathogenesis,clinical ntation,identification, functional changes, acute care, ization, management and rehabilitation of falls in the y ibe and discuss the aetiopathogenesis,clinical ntation,identification, functional changes, acute care, ization, management and rehabilitation of common res in the elderly ibe and discuss the aetiopathogenesis,clinical ntation,identification, functional changes, acute care, ization, management and rehabilitation of vision and loss in the elderly ibe and discuss the aetiopathogenesis,clinical ntation,identification, functional changes, acute care, ization, management and rehabilitation of vision and loss in the elderly ibe and discuss the principles of physical and social ilitation, functional assessment, role of otherapy andoccupational therapy in the gement of disability in the elderly ibe and discuss the aetiopathogenesis,clinical ntation,identification, functional changes, acute care, ization, management and rehabilitation of hearing loss elderly ibe and discuss the aetiopathogenesis, clinical ntation, complications, assessment and management of ional disorders the elderly ibe and discuss the aetiopathogenesis, clinical ntation, complications, assessment and management of ional disorders the elderly ibe and discuss the aetiopathogenesis, clinical ntation, complications, assessment and management of iona	

SI. IM No No.	Торіс	
	Topic: Heart Failure	
IM1.18	Perform and interpret a 12 lead ECG	Clinical
IM1.22	Assist and demonstrate the proper technique in collecting	Clinical
1111.22	specimen for blood culture	Chinear
	Topic: Pneumonia	
IM3.16	Describe and enumerate the indications for isolation and	Clinical
1113.10	barriernursing in patients with pneumonia	Cillical
	Describe and discuss the supportive therapy in patients with	
IM3.17	pneumonia including oxygen use and indications for	Clinical
	ventilation	
ł	Topic: Fever and febrile syndromes	
DA 17	Observe and assist in the performance of a bone marrow	C1' ' 1
IM4.17	aspirationand biopsy in a simulated environment	Clinical
IM4.19	Assist in the collection of blood and wound cultures	Clinical
IM4.20	Interpret a PPD (Mantoux)	Clinical
ł	Topic: HIV	
DAG 12	Enumerate the indications for and interpret the results	C1' ' 1
IM6.12	of: pulseoximetry, ABG, Chest Radiograph	Clinical
IM6.14	Perform and interpret AFB sputum	Clinical
I	Topic: Hypertension	
IM9.19	Topic: Hypertension           Assist in a blood transfusion	Clinical
I	Topic: Acute Kidney Injury and Chronic renal failure	
	Describe and discuss the indications, demonstrate in a	
IM10.22		Clinical
	dialysis catheter	
I	Topic: Diabetes Mellitus	
IM11.12	Perform and interpret a capillary blood glucose test	Clinical
IM11.13	Perform and interpret a urinary ketone estimation with a	Clinical
11/111.15	dipstick	Chinical
IM11.19	Demonstrate and counsel patients on the correct	Clinical
	technique toadminister insulin	
IM11.20	Demonstrate to and counsel patients on the correct	Clinical
	technique of self-monitoring of blood glucoses	Chinical
	Topic: Common malignancies	
	- ·	
IM13.8	includes an appropriate general and local examination that	Clinical
11113.0	excludes the diagnosis, extent spread and complications	Cinical
	of cancer	
	Generate a differential diagnosis based on the presenting	
IM13.10		Clinical
IM13.11	Order and interpret diagnostic testing based on the	Clinical
IM13.8 IM13.10	<ul> <li>Perform and demonstrate a physical examination that includes anappropriate general and local examination that excludes the diagnosis, extent spread and complications of cancer</li> <li>Generate a differential diagnosis based on the presenting symptomsand clinical features and prioritise based on the most likely diagnosis</li> </ul>	Clinica Clinica

# **Clinical topics for Clinical teaching**

	blood and prostatespecific antigen	
	Topic: Obesity	
IM14.11	Communicate and counsel patient on behavioural, dietary and lifestyle modifications	Clinical
IM14.12	Demonstrate an understanding of patient's inability to adhere to lifestyle instructions and counsel them in a non - judgemental way	Clinical
·	Topic: GI bleeding	·
IM15.4	Elicit and document and present an appropriate history that identifies the route of bleeding, quantity, grade, volume loss, duration, etiology, comorbid illnesses and risk factors	Clinical
IM15.6	Distinguish between upper and lower gastrointestinal bleeding based on the clinical features	Clinical
IM15.13	Observe cross matching and blood / blood component transfusion	Clinical
IM15.18	Counsel the family and patient in an empathetic non- judgmentalmanner on the diagnosis and therapeutic options	
	Topic: Cerebrovascular accident	·
IM18.17	Counsel patient and family about the diagnosis and therapy in an empathetic manner	Clinical
	Topic: Poisoning	1
IM21.7	Counsel family members of a patient with suspected poisoningabout the clinical and medico legal aspects with empathy	Clinical
	Topic: The role of the physician in the community	
IM26.15	Identify, discuss and defend, medicolegal, socio-cultural and ethicalissues as they pertain to consent for surgical procedures	Clinical
IM26.27	Demonstrate personal grooming that is adequate and appropriate for health care responsibilities	Clinical

# **Heart Failure**

- 1. Describe and discuss the epidemiology, pathogenesis clinical evolution and course of common causes of heart disease including: rheumatic/ valvular, ischemic, hypertrophic inflammatory
- 2. Describe and discuss the genetic basis of some forms of heart Failure
- 3. Describe and discuss the aetiology microbiology pathogenies and clinical evolution of rheumatic fever, criteria, degree of rheumatic activity and rheumatic valvular heart disease and its complications including infective endocarditis
- 4. Stage heart failure

# Acute Myocardial Infarction/ IHD

- 1. Discuss and describe the epidemiology, antecedents and risk factors for atherosclerosis and ischemic heart disease
- 2. Discuss the aetiology of risk factors both modifiable and non-modifiable of atherosclerosis and IHD
- 3. Discuss and describe the lipid cycle and the role of dyslipidaemia in the pathogenesis of atherosclerosis
- 4. Discuss and describe the pathogenesis natural history, evolution and complications of atherosclerosis and IHD

# Pneumonia

- 1. Define, discuss, describe and distinguish community acquired pneumonia, nosocomial pneumonia and aspiration pneumonia
- 2. Discuss and describe the aetiologies of various kinds of pneumonia and their microbiology depending on the setting and immune status of the host
- 3. Discuss and describe the pathogenesis, presentation, natural history and complications of pneumonia

# Fever & Febrile Syndromes

- 1. Describe and discuss the febrile response and the influence of host immune status, risk factors and comorbidities on the febrile.
- 2. Describe and discuss the influence of special populations on the febrile response including: the elderly, immune suppression, malignancy and neutropenia, HIV and travel.
- 3. Discuss and describe the common causes, pathophysiology and manifestations of fever in various regions in India including bacterial, parasitic and viral causes (e.g. Dengue, Chikungunya, Typhus)
- 4. Describe and discuss the pathophysiology and manifestations of inflammatory causes of fever.
- 5. Describe and discuss the pathophysiology and manifestations of malignant causes of fever including hematologic and lymph node malignancies.

# Liver Disease:

- 1. Describe and discuss the physiologic and biochemical basis of hyperbilirubinemia
- 2. Describe and discuss the aetiology and pathophysiology of liver injury
- 3. Describe and discuss the pathologic changes in various forms of liver disease
- 4. Describe and discuss the epidemiology, microbiology, immunology and clinical evolution of infective (viral) hepatitis
- 5. Describe and discuss the pathophysiology and clinical evolution of alcoholic liver disease

# **Template of total teaching hours**

Theory	Clinical	Tutorial	SDL
70 Hours	Two Postings	125 Hours	15 Hours
	(08 Weeks, 04 Weeks)		

# **Teaching - learning methods (theory & postings)**

- 1. Large Group Lectures (Interactive)
- 2. Small Group Practicals/ Demonstration
- 3. Case Scenario
- 4. Self-Directed Learning
- 5. OSPE / OSCE
- 6. AETCOM Module
- 7. Pandemic Module
- 8. Innovative Methods (Quiz / Role Play /Seminars / Street Play / Group Discussion)

#### Number of teaching hours

Theory	Clinical	Tutorial	SDL	SGD	AETCOM	Pandemic
					Module	Module
70 hours	Two Postings (08 weeks, 04 weeks) (03 hours/day)	125 Hours	15 Hours	10 Hours	-	2 hours

#### Vertical & horizontal integration

OBG	Surgery	Orthopaedic	Ophthalmology
Jaundice in Pregnancy	GI Bleed/Endoscopy	Geriatric	Geriatric
(Bio-chemistry)		osteoporosis	Ophthalmology
	Geriatric Surgery		Rehabilitation
Diabetes Mellitus in Pregnancy			
(Bio-chemistry/Paediatric)	IBD Surgery		

#### **Remedial measures for slow learners**

- 1. Small Group Discussion
- 2. Extra Classes
- 3. Written, Topic wise Tests
- 4. Skill Assessment
- 5. Assignments

# **AETCOM modules**

Subject	Competency Number	Competency
	Number	
Medicine and	4.1A	The student should be able to: Demonstrate ability
Allied Subjects		to communicate to patients in a patient, respectful,
		nonthreatening, non-judgmental and empathetic
		manner
	4.1 B	The student should be able to: Communicate
		diagnostic and therapeutic options to patient and
		family in a simulated environment
	4.3	The student should be able to: Identify and discuss
		medico-legal, socio-economic and ethical issues as
		it pertains to organ donation

# Pandemic module

# **Classes- 2 Hours**

- 4.1 Care of patients during Pandemics -Allied with Chest and TB
- 4.2 Emergency Procedures-
- 4.3 Death related management Allied with Chest and TB
- 4.4 Communications and media management Allied with Chest and TB
- 4.5 Intensive Care Management during Pandemics -
- 4.6 Palliative Care during Pandemics Allied with Chest and TB

# **Formative Assessment**

- 1. Written Test
- 2. MCQ Test
- 3. Viva
- 4. Skill Assessment
- 5. Log Book
- 6. Internal assessment (Written and Practical Test)
- 7. Mid Term
- 8. Prelims
- 9. Departmental Test once in two months (8<sup>th</sup> weekly) (Yearly 06 Tests)
- 10. Block Posting Examinations (Ward Leaving Test)

# Internal Assessment (Refer Section II)

Internal Assessment: Internal assessment shall be based on day-to-day assessment. It shall relate to different ways in which learners participate in learning process including assignments, preparation for seminar, clinical case presentation, preparation of clinical case for discussion, clinical case study/ problem solving exercise, participation in project for health care in the community. Internal assessment shall not be added to summative assessment. However, internal assessment should be displayed under a separate column in detailed marks card.

Learners must have completed the required certifiable competencies for that phase of training and completed the log book appropriate for that phase of training to be eligible for appearing at the final university examination of that subject.

Regular periodic examinations shall be conducted throughout the course. There shall be no less than three internal assessment be conducted examinations in each subject of first and second professional year, and no less than two examinations in each subject of final professional year. An end of posting clinical assessment shall be conducted for each clinical posting in each professional year.

When subjects are taught in more than one phase, the internal assessment must be done in each phase and must contribute proportionately to final assessment. For example, General Medicine must be assessed in second Professional, third Professional Part I and third Professional Part II, independently.

Day to day records and log book (including required skill certifications) should be given importance in internal assessment. Internal assessment should be based on competencies and skills.

The final internal assessment in a broad clinical specialty (e.g., Medicine and allied specialties etc.) shall comprise of marks from all the constituent specialties. The proportion of the marks for each constituent specialty shall be determined by the time of instruction allotted to each.

Learners must secure at least 50% marks of the total marks (combined in theory and practical / clinical: not less than 40% marks in theory and practical separately) for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject. Internal assessment marks will reflect as separate head of passing at the summative examination.

The results of internal assessment should be displayed on the notice board

Within one week of the test.

Universities shall guide the colleges regarding formulating policies for remedial measures for students who are either not able to score qualifying marks or have missed on some assessments due to any reason.

# IA marks distribution & eligibility (Refer Section II)

# Distribution of Topics between papers – I & II of MBBS – III/II

# **TOPICS FOR PAPER – I**

- 1. Clinical Methods in the practice of medicine.
- 2. Common symptoms of disease.
- 3. Nutrition / Exposure in Physical and Chemical Agents.
- 4. Infections.
- 5. Haematology.
- 6. Cardiovascular System.
- 7. Gastro-Internal Tract & Liver Disorders
- 8. Emergency Medicine.
- 9. Neurological System.

# Model Question Paper (Professional Year III) General Medicine- Paper I

Time: 09.30 am to 12.30 pm

Max.Marks:100

# I. 20 Marks - MCQs

Section-A- 80 Marks:

LONG ESSAY	2 Questions of 10 Marks each	2x10=20
Short Essay	6 Questions of 5 Marks each	05x06=30
Short Answer	10 Questions of 3 Marks each	03x10=30

#### **TOPICS FOR PAPER – II**

- 1. Nephrology and Urinary System.
- 2. Connective Tissue Disorders
- 3. Endocrines
- 4. Geriatrics
- 5. Bio-Medical Waste. Allied

- 6. Psychiatry.
- 7. Dermatology and Sexually Transmitted Diseases
- 8. Respiratory Diseases and Tuberculosis

# Model Question Paper (Professional Year III) General Medicine- Paper II

Time: 09.30 am to 12.30 pm

Max.Marks:100

# 20 Marks – MCQs: (10 Marks- Respiratory Medicine including Tuberculosis, Psychiatry & Dermatology, Venereology and Leprosy)

#### Section A- 40 Marks:

LONG ESSAY	1 Question of 10 Marks	1x10=10
Short Essay	5 Questions of 3 Marks each	03x05=15
Short Answer	05 Questions of 3 Marks each	05x03=15

# Section-B-40 Marks: (Allied-Respiratory Medicine including Tuberculosis, Psychiatry & Dermatology, Venereology and Leprosy)

		Respiratory Medicine including Tuberculosis	Psychiatry	Dermatology, Venereology and Leprosy
LONG ESSAY	01 Questions of 10 Marks each, (1 x 10=10)	1	-	-
Short Essay	03 Questions of 05 Marks each, (3x5=15)	1	1	1
Short Answer	05 Questions of 03 Marks each, (5x3=15)	1	2	2
Total	40 Marks			

# Log Book: Refer Section II

Reference books (Latest edition)

- 1. Harrison's Principles of Internal Medicine
- 2. Davidson's Principles and Practice of Medicine
- 3. Hutchison's Clinical Methods
- 4. P. S. Shanka's, Clinical mannual
- 5. Chamberlain's Symptoms and Signs in Clinical Medicine
- 6. API Book of Medicine



# BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA RESPIRATORY MEDICINE CURRICULUM

# Goal:

The student should become a clinician who understands the Respiratory diseeases and provides preventive, promotive, curative, palliative and holistic care with compassion . He should be a lifelong learner committed to continuous improvement of Skills, and knowledge. He should create awareness in the people about Environmental care, Ecosystem balance Vegan diet and to maintain Bio-diversity to save our planet.

# **Objectives:**

- 1. To teach the structure and function of the Respiratory System.
- 2. To teach the Physical examination so as to diagnose the Respiratory disease or disorder.
- 3. The Treatment of Respiratory System disorders with appropriate antibiotics and proper anti-TB Regimens for TB using NTEP guidelines.
- 4. Measures to prevent and treat Environmental problems.
- 5. To create awareness for Environmental care, animal care, maintaining biodiversity, Vegan Diet to save it etc.

# **Topics & Outcomes in Respiratory Medicine:**

Sl. No.	Subject	Number of topics	Number of outcomes
	Respiratory Medicine	02	47

# 4. Course content:

<b>Topic: Tuberculosis</b>	sis
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Number of competencies: (19)

Number of procedures that require certification: (01)

Number	COMPETENCY The student should be able to	Domain K/S/A/ C	Level K/KH / SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessme nt method	Number required to certify P	Vertical Integrati on	Horizo ntal Integr ation
CT1.1	Describe and discuss the epidemiology of tuberculosis and its impact on the work, life and economy of India	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce		Communi ty Medicine	
CT1.2	Describe and discuss the microbiology of tubercle bacillus, mode of transmission, pathogenesis, clinical evolution and natural history of pulmonary and extra pulmonary forms (including lymph node, bone and CNS)	K	КН	Y	Lecture, Small group discussion	written		Microbiol ogy	
CT1.3	Discuss and describe the impact of co-infection with HIV and other co- morbid conditions. Like diabetes on the natural history of tuberculosis	К	K	Y	Lecture, Small group discussion	written		Microbiol ogy	
CT1.4	Describe the epidemiology, the predisposing factors and microbial and therapeutic factors that determine resistance to drugs	K	КН	Y	Lecture, Small group discussion	Written/Vi va voce		Communi ty Medicine Microbiol ogy Pharmaco logy	
CT1.5	Elicit, document and present an appropriate medical history that includes risk factor, contacts, symptoms including cough and fever CNS and other manifestations	S	КН	Y	Bed side clinic, DOAP session	Skill assessment			
CT1.6	Demonstrate and perform a systematic examination that establishes the diagnosis based on the clinical presentation that includes a a) general examination, b) examination of the chest and lung including loss of volume, mediastinal shift, percussion and auscultation (including DOAP session of lung sounds and added sounds) c) examination of the lymphatic system and d) relevant CNS examination	S	КН	Y	Bed side clinic, DOAP session	Skill assessment			

BLDE (Deemed to be University)

Number	COMPETENCY The student should be able to	Domain K/S/A/ C	Level K/KH / SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessme nt method	Number required to certify P	Vertical Integrati on	Horizo ntal Integr ation
CT1.7	Perform and interpret a PPD (mantoux) and describe and discuss the indications and pitfalls of the test	S	Р	Y	DOAP session	Maintenan ce of log book		Microbiol ogy	
CT1.8	Generate a differential diagnosis based on the clinical history and evolution of the disease that prioritises the most likely diagnosis	K	K	Y	Bedside clinic, Small group discussion	Bedside clinic/ Viva voce			
CT1.9	Order and interpret diagnostic tests based on the clinical presentation including: CBC, Chest X ray PA view, Mantoux, sputum culture and sensitivity, pleural fluid examination and culture, HIV testing	K	К	Y	Bedside clinic, DOAP session	Skill assessment			
CT1.10	Perform and interpret an AFB stain	S	Р	Y	DOAP session	Skill assessment	1	Microbiol ogy	
CT1.11	Assist in the performance, outline the correct tests that require to be performed and interpret the results of a pleural fluid aspiration	S	КН	Y	Skill assessment	Skill assessment			
CT1.12	Enumerate the indications for tests including: serology, special cultures and polymerase chain reaction and sensitivity testing	К	КН	Y	Small group discussion	Short note/ Viva voce		Microbiol ogy	
CT1.13	Describe and discuss the origin, indications, technique of administration, efficacy and complications of the BCG vaccine	K	KH	Y	Lecture, Small group discussion	Short note/ Viva voce		Microbiol ogy	
CT1.14	Describe and discuss the pharmacology of various anti-tuberculous agents, their indications, contraindications, interactions and adverse reactions	К	КН	Y	Lecture, Small group discussion	Short note/ Viva voce		Pharmaco logy Microbiol ogy	

Number	COMPETENCY The student should be able to	Domain K/S/A/ C	Level K/KH / SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessme nt method	Number required to certify P	Vertical Integrati on	Horizo ntal Integr ation
CT1.15	Prescribe an appropriate antituberculosis regimen based on the location of disease, smear positivity and negativity and comorbidities based on current national guidelines including directly observed tuberculosis therapy (DOTS)	K	КН	Y	Bedside clinic, Small group discussion Lecture	Skill assessment		Pharmaco logy Communi ty Medicine	
CT1.16	Describe the appropriate precautions, screening, testing and indications for chemoprophylaxis for contacts and exposed health care workers	K	КН	Y	Bedside clinic, Small group discussion	Written		Communi ty Medicine	
CT1.17	Define criteria for the cure of Tuberculosis; describe and recognise the features of drug resistant tuberculosis, prevention and therapeutic regimens	S	Р	Y	Lecture Small Group discussion	Written			
CT1.18	Educate health care workers on National Program of Tuberculosis and administering and monitoring the DOTS program	С	SH	Y	DOAP session	Skill assessment		Communi ty Medicine	
CT1.19	Communicate with patients and family in an empathetic manner about the diagnosis, therapy	S	Р	Y	DOAP session	Skill assessment		AETCO M	

Topic: 0	Obstructive airway disease	Numbe	r of com	petenci	es: (28) Number	r of procedures th	at require certification: (01)
CT2.1	Define and classify obstructive airway disease	K	КН	Y	Lecture, Small group discussion	Written/ Viva voce	Physiology , Pathology
CT2.2	Describe and discuss the epidemiology, risk factors and evolution of obstructive airway disease	K	КН	Y	Lecture, Small group discussion	Written/ Viva voce	Physiology , Pathology
CT2.3	Enumerate and describe the causes of acute episodes in patients with obstructive airway disease	K	КН	Y	Lecture, Small group discussion	Written/ Viva voce	
CT2.4	Describe and discuss the physiology and pathophysiology of hypoxia and hypercapneia	К	КН	Y	Lecture, Small group discussion	Written/ Viva voce	Physiology , Pathology
CT2.5	Describe and discuss the genetics of alpha 1 antitrypsin deficiency in emphysema	К	КН	Y	Lecture, Small group discussion	Written/ Viva voce	Physiology , Pathology
CT2.6	Describe the role of the environment in the cause and exacerbation of obstructive airway disease	К	КН	Y	Lecture, Small group discussion	Written/ Viva voce	Pathology
CT2.7	Describe and discuss allergic and non-allergic precipitants of obstructive airway disease	K	КН	Y	Lecture, Small group discussion	Written/ Viva voce	Pathology
CT2.8	Elicit document and present a medical history that will differentiate the aetiologies of obstructive airway disease, severity and precipitants	S	SH	Y	Bed side clinic, DOAP session	Skill assessm ent	
CT2.9	Perform a systematic examination that establishes the diagnosis and severity that includes measurement of respiratory rate, level of respiratory distress, effort tolerance, breath sounds, added sounds, identification of signs of consolidation pleural effusion and pneumothorax	S	SH	Y	Bed side clinic, DOAP session	Skill assessm ent	

BLDE (Deemed to be University)

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessme nt method	Number required to certify P	Vertic al Integr ation	Horizont al Integrati on
CT2.10	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	S	SH	Y	Bed side clinic, DOAP session	Skill assessment			
CT2.11	Describe, discuss and interpret pulmonary function tests	S	SH	Y	Bed side clinic, DOAP session	Skill assessment		Physiol ogy, Patholo gy	
CT2.12	Perform and interpret peak expiratory flow rate	S	Р	Y	Bed side clinic, DOAP session	documenta tion in log book/ Skill assessment	3		
CT2.13	Describe the appropriate diagnostic work up based on the presumed aetiology	S	SH	Y	Bed side clinic, Small group discussion	Written/ Skill assessment			
CT2.14	Enumerate the indications for and interpret the results of : pulse oximetry, ABG, Chest Radiograph	K	SH	Y	Bed side clinic, Small group discussion DOAP session	Written/ Skill assessment			
CT2.15	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	K	SH	Y	Bed side clinic, Small group discussion DOAP session	Written/ Skill assessment			
CT2.16	Discuss and describe therapies for OAD including bronchodilators, leukotriene inhibitors, mast cell stabilisers, theophylline, inhaled and systemic steroids, oxygen and immunotherapy	K	SH	Y	Lecture, Small group discussion	Written/ Viva voce		Pharma cology	
CT2.17	Describe and discuss the indications for vaccinations in OAD	K	SH	Y	Lecture, Small group discussion	Written/ Viva voce			
CT2.18	Develop a therapeutic plan including use of bronchodilators and inhaled corticosteroids	К	SH	Y	Bed side clinic, Small group discussion DOAP session	Written/ Skill assessment			

Number	COMPETENCY The student should be able to	Domain K/S/A/ C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessme nt method	Number required to certify P	Vertic al Integr ation	Horiz ontal Integ ration
CT2.19	Develop a management plan for acute exacerbations including bronchodilators, systemic steroids, antimicrobial therapy	K	SH	Y	Bedside clinics, Small group discussion, DOAP session	Written/ Skill assessment			
CT2.20	Describe and discuss the principles and use of oxygen therapy in the hospital and at home	K	КН	Y	Lecture, Small group discussion	Written/ Viva voce			
CT2.21	Describe discuss and counsel patients appropriately on smoking cessation	K/C	SH	Y	DOAP session	Skill assessment		AETC OM	
CT2.22	Demonstrate and counsel patient on the correct use of inhalers	S/C	SH	Y	DOAP session	Skill assessment			
CT2.23	Communicate diagnosis treatment plan and subsequent follow up plan to patients	K/C	KH	Y	DOAP session	Skill assessment			
CT2.24	Recognize the impact of OAD on patient's quality of life, wellbeing, work and family	A	КН	Y	Small group discussion Bedside clinics	Observatio n by faculty		Comm unity Medic ine	
CT2.25	Discuss and describe the impact of OAD on the society and workplace	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce		Comm unity Medic ine	
CT2.26	Discuss and describe preventive measures to reduce OAD in workplaces	K	КН	Y	Lecture, Small group discussion	Written/ Viva voce		Comm unity Medic ine	
CT2.27	Demonstrate an understanding of patient's inability to change working, living and environmental factors that influence progression of airway disease	A	КН	Y	Small group discussion Bedside clinics	Observatio n by faculty		Comm unity Medic ine	
CT2.28	Demonstrate an understanding for the difficulties faced by patients during smoking cessation	A	КН	Y	Small group discussion Bedside clinics	Observatio n by faculty			
	Column C: K- Knowledge Column D: K – Knows, Kl Column F: DOAP session Column H: If entry is P: in graduation	H - Knows – Demonsti	How, SH - ate, Obse	Shows h rve, Asse	ow, P- perfor ss, Perform.	ms independe	ently,	ation/	

Must know Topics	Nice to know	Desirable know topics
Topic: Tuberculosis		
CT 1.2	CT 1.3	CT 1. 1
CT 1.4	CT 1.7	CT 1. 18
CT 1.5	CT 1.10	CT 1. 19
CT 1.6	CT 1.13	
CT 1.8		
CT 1.9		
CT 1.11		
CT 1.12		
CT 1.14		
CT 1.15		
CT 1.16		
CT 1.17		

# 5. Teaching –learning methods (Theory & Postings)

# 6. Topic:Obstructive airway disease

Must know Topics	Nice to know	Desirableto know
		topics
CT 2.1	CT 2.4	
CT 2.2	CT 2.7	
CT 2.3	CT 2.13	CT 2.17
CT 2.5	CT 2.15	CT 2.21
CT 2.6	CT 2.16	CT 2.23
CT 2.8	CT 2.22	CT 2.27
CT 2.9	CT 2.24	CT 2.28
CT 2.10	CT 2.25	
CT 2.11	CT 2.26	
CT 2.12		
CT 2.14		
CT 2.18		
CT 2.19		

# 7. Number of teaching hours

	Hours	Total hours
Theory	10	
Clinical Posting	216	226

<b>Competency Numbers</b>	Vertical integration	Horizontal integration
	<b>Community medicine</b>	
CT 1.1	Community medicine	
CT 1.2	Microbiology	
CT 1.3	Microbiology	
CT 1.4	Community medicine	
	Microbiology	
	Pharmacology	
CT 1.7	Microbiology	
CT 1.10	Microbiology	
CT 1.12	Microbiology	
CT 1.13	Microbiology	
CT 1.14	Pharmacology	
	Microbiology	
CT 1.15	Pharmacology	
	Community medicine	
CT 1.16	Community medicine	
CT 1.18	Community medicine	
CT 1.19	AETCOM	

# 8. vertical & horizontal Integration

# Topic 2

Competencies	Vertical integration	Horizontal integration
Numbers		
CT 2.1	Physiology, Pathology	
CT 2.2	Physiology, Pathology	
CT 2.4	Physiology, Pathology	
CT 2.5	Physiology, Pathology	
CT 2.6	Pathology,	
CT 2.7	Pathology,	
CT 2.11	Physiology, Pathology	
CT 2.16	Pharmacology,	
CT 2.21	AETCOM	
CT 2.24	Community medicine	
CT 2.25	Community medicine	
CT 2.26	Community medicine	
CT 2.27	Community medicine	

# **INTEGRATION**

Competencies Numbers	Vertical integration	Horizontal integration
	<b>Community medicine</b>	
PY 6.8	Respiratory Medicine	
PH 1.32	Respiratory Medicine	
PH 1.33	Respiratory Medicine	
PH 1.44	Respiratory Medicine	
PH 1.45	Respiratory Medicine	Microbiology
IM 24.10		Respiratory Medicine
PE 28.19	Respiratory Medicine	

# 9. Remedial measures for slow Learners

One day is allotted for explanation of querries, difficulties and Counselling for clinical postings and during theory Classes

# **10.** Assessment (Formative)

Test after completion of postings on clinical examination

# 12. Reference book list with latest edition

Sl. No.	Name of the book	Editors/ Authors	Latest edition
01	Davidson,s Principles and	Edted by	24 <sup>th</sup>
	Practice of Medicine	Ian Penman	
		• Stuart H, Ralstion	
		Matk Stra chan	
		Richard Hobson	
02	Hutchison,s Clinical Methods	Author	$25^{\text{th}}$
		Michael Glynn	
		William M Drake	
03	Harrison's Principles	Authors	21 <sup>st</sup>
	of Internal Medicine	Loscalzo	
		Fauci	
		• Kasper	
		• Hduser	
		• Longo	
		• Jameson	
04	Crofton and Douglas's	Authors	5 <sup>th</sup>
	Respiratory diseases	Anthony Seaton	
		Douglas Seaton	
		A Gordon Leitch	



#### BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA DERMATOLOGY, VENEREOLOGY AND LEPROSY CURRICULUM

## Goal:

The main goal of undergraduate teaching in Dermatology, Venereology and Leprosy is to train the student in such a way that he/she acquires knowledge and skills to diagnose and treat common dermatoses, and refer complications of common dermatoses or emergencies or rare diseases to a specialist.

## **Objectives:**

At the end of the course in Dermatology, Venereology and Leprosy, the student should demonstrate the following knowledge and skills:

- A. Knowledge
- 1. Clinical manifestations and complications of common dermatological conditions and emergencies
- 2. Relevant investigations to confirm the diagnosis of common dermatoses
- 3. Pharmacology of commonly used topical preparations and systemic drugs in Dermatology, Venereology and Leprosy
- 4. Various therapeutic options (both medical and surgical) available for a given disease and selection of appropriate therapy after discussing the same with patients and/or their relatives
- 5. Recognition of need for referral in case of complications developed during the treatment of common dermatoses, or emergencies, or rare diseases
- B. Skills
- 1. Elicitation of relevant and correct clinical history and presenting it in a chronological order
- 2. Complete clinical examination and demonstration of diagnostic clinical signs and/or tests that will help in arriving at the correct diagnosis of common dermatoses and emergencies
- 3. Simple side-lab procedures or tests required to make bedside diagnoses
- 4. Method of application of various topical preparations and compresses used in the treatment of common dermatoses

## **TOPICS:**

Sl. No.	Торіс	No. of competency	Domain	No. of teaching sessions
DR1	Acne	03	K & S	1
DR2	Vitiligo	02	K & S	1
DR3	Papulosquamous disorders	03	K & S	1
DR4	Lichen Planus	02	K & S	1
DR5	Scabies	03	K & S	1
DR6	Pediculosis	02	K & S	1
DR7	Fungal infections	03	K & S	1
DR8	Viral infections	07	K & S	2
DR9	Leprosy	07	K & S	4
DR10	STDs	11	K & S	3
DR11	HIV	03	K & S	1
DR12	Dermatitis and Eczema	07	K & S	2
DR13	Vesiculobullous lesions	03	K & S	1
DR14	Urticaria & Angioedema	05	K & S	1
DR15	Pyoderma	04	K & S	1
DR16	Collagen vascular diseases	02	K & S	1
DR17	Nutritional Deficiencies and the skin	04	K & S	1
DR18	Systemic diseases and the skin	02	K & S	1

Sl. No.	Integrated Speciality	Vertical/Horizontal	Domain	No. of teaching hours
AN 4.2	Human anatomy	Vertical	Κ	01
PA 34.1	Pathology	Vertical	K & S	01
MI 4.3 7.2	Microbiology	Vertical	K	01
PH 1.46 1.57	Pharmacology	Vertical	Κ	01
PE 31.4	Pediatrics	Vertical	S	01

## MUST KNOW TOPICS

Topic 1: Acne

- Enumerate the causative and risk factors of acne
- Identify and grade the various common types of acne
- Describe the treatment and preventive measures for various kinds of acne

## Topic 2: Vitiligo

- Identify and differentiate vitiligo from other causes of hypopigmented lesions
- Describe the treatment of vitiligo

Topic 3: Papulosquamous disorders

- Identify and distinguish psoriatic lesions from other causes
- Demonstrate the grattage test
- Enumerate the indications for and describe the various modalities of treatment of psoriasis including topical, systemic and phototherapy

Topic 4: Lichen Planus

- Identify and distinguish lichen planus lesions from other causes
- Enumerate and describe the treatment modalities for lichen planus

Topic 5: Scabies

- Describe the etiology, microbiology, pathogenesis, natural history, clinical features, presentations and complications of scabies in adults and children
- Identify and differentiate scabies from other lesions in adults and children
- Enumerate and describe the pharmacology, administration and adverse reaction of pharmacotherapies for scabies

Topic 6: Pediculosis

- Describe the etiology pathogenesis and diagnostic features of pediculosis in adults and children
- Identify and differentiate pediculosis from other skin lesions in adults and children

Topic 7: Fungal Infections

- Describe the etiology, microbiology, pathogenesis and clinical K KH Y presentation and diagnostic features of dermatophytes in adults and children
- Identify Candida species in fungal scrapings and KOH mount
- Describe the pharmacology and action of antifungal (systemic and topical) agents. Enumerate side effects of antifungal therapy

Dermatology, Venereology and Leprosy

Topic 8: Viral Infections

- Describe the etiology, microbiology, pathogenesis and clinical presentations and diagnostic features of common viral infections of the skin in adults and children
- Identify and distinguish herpes simplex and herpes labialis from other skin lesions
- Identify and distinguish herpes zoster and varicella from other skin lesions
- Identify and distinguish viral warts from other skin lesions
- Identify and distinguish molluscum contagiosum from other skin lesions
- Enumerate the indications, describe the procedure and perform a Tzanck smear
- Enumerate the indications and describe the pharmacology, administration and adverse reaction of pharmacotherapies for common viral illnesses of the skin

Topic 9: Leprosy

- Classify, describe the epidemiology, etiology, microbiology, pathogenesis, clinical presentations and diagnostic features of Leprosy
- Demonstrate (and classify based on) the clinical features of leprosy including an appropriate neurologic examination
- Enumerate the indications and observe the performance of a slit skin smear in patients with leprosy
- Enumerate, describe and identify lepra reactions and supportive measures and therapy of lepra reactions
- Enumerate the indications and describe the pharmacology, administration and adverse reaction of pharmacotherapies for various classes of leprosy based on national guidelines
- Describe the treatment of Leprosy based on the WHO guidelines
- Enumerate and describe the complications of leprosy and its management, including understanding disability and stigma.

Topic 10: Sexually Transmitted Diseases

- Identify and classify syphilis based on the presentation and clinical manifestations
- Identify spirochete in a dark ground microscopy
- Enumerate the indications and describe the pharmacology, administration and adverse reaction of pharmacotherapies for syphilis
- Describe the prevention of congenital syphilis
- Counsel in a non-judgemental and empathetic manner patients on prevention of sexually transmitted disease
- Describe the etiology, diagnostic and clinical features of non-syphilitic sexually transmitted diseases (chancroid, donovanosis and LGV)
- Identify and differentiate based on the clinical features non-syphilitic sexually transmitted diseases (chancroid, donovanosis and LGV)

Dermatology, Venereology and Leprosy

- Enumerate the indications and describe the pharmacology, indications and adverse reactions of drugs used in the non- syphilitic sexually transmitted diseases (chancroid, donovanosis and LGV)
- Describe the syndromic approach to ulcerative sexually transmitted disease
- Describe the etiology, diagnostic and clinical features and management of gonococcal and non-gonococcal urethritis
- Describe the etiology, diagnostic and clinical features and management of vaginal discharge

Topic 11: HIV

- Describe the etiology, pathogenesis and clinical features of the dermatologic manifestations of HIV and its complications including opportunistic infections
- Identify and distinguish the dermatologic manifestations of HIV, its complications, opportunistic infections and adverse reactions
- Enumerate the indications and describe the pharmacology, administration and adverse reaction of pharmacotherapies for dermatologic lesions in HIV

## NICE TO KNOW TOPICS

Topic 12: Dermatitis and Eczema

- Describe the aetiopathogenesis of eczema
- Identify eczema and differentiate it from lichenification and changes of aging
- Classify and grade eczema
- Enumerate the indications and describe the pharmacology, indications and adverse reactions of drugs used in the treatment of eczema
- Define erythroderma. Enumerate and identify the causes of erythroderma. Discuss the treatment
- Identify and distinguish exfoliative dermatitis from other skin lesions
- Identify and distinguish fixed drug eruptions and Steven Johnson syndrome from other skin lesions

Topic 13: Vesiculobullous Lesions

- Distinguish bulla from vesicles
- Demonstrate the Tzanck test, nikolsky sign and bulla spread sign
- Calculate the body surface area of involvement of vesiculobullous lesions

Topic 14: Urticaria/ Angioedema

- Describe the etiology, pathogenesis and clinical precipitating
- features and classification of Urticaria and angioedema
- Identify and distinguish urticarial from other skin lesions

- Demonstrate dermographism
- Identify and distinguish angioedema from other skin lesions
- Enumerate the indications and describe the pharmacology indications and adverse reactions of drugs used in the urticaria and angioedema

Topic 15: Pyoderma

- Identify and distinguish folliculitis impetigo and carbuncle from other skin lesions
- Identify staphylococcus on a gram stain
- Enumerate the indications and describe the pharmacology, indications and adverse reactions of topical and systemic drugs used in treatment of pyoderma
- Enumerate the indications for surgical referral

## **Desirable to Know Topics**

Topic 16: Collagen Vascular disease

- Identify and distinguish skin lesions of SLE
- Identify and distinguish Raynaud's phenomenon

Topic 17: Nutritional Deficiencies and Skin

- Enumerate and identify the cutaneous findings in vitamin A deficiency
- Enumerate and describe the various skin changes in Vitamin B complex deficiency
- Enumerate and describe the various changes in Vitamin C deficiency
- Enumerate and describe the various changes in Zinc deficiency

Topic 18: Systemic diseases and Skin

- Enumerate the cutaneous features of Type 2 diabetes
- Enumerate the cutaneous features of hypo/hyper-thyroidism

## **Teaching methods**

- 1. Structured interactive sessions (Lectures using PPTs)
- 2. Small group discussions (demonstration and discussion of clinical cases during clinical postings)
- 3. Bedside clinic

## Number of teaching hours

Theory - 24 (hours) Clinical - 2 weeks for 4th term 2 weeks for 6th term 2 weeks for 8th term

Dermatology, Venereology and Leprosy

## Vertical & horizontal Integration

### Human Anatomy

- AN 4.2: Describe structure & function of skin with its appendages
- AN 4.4: Describe modifications of deep fascia with its functions
- AN 4.5: Explain principles of skin incisions

### Pathology

- PA34.1: Describe the risk factors, pathogenesis, pathology and natural history of squamous cell carcinoma of the skin
- PA34.2: Describe the risk factors, pathogenesis, pathology and natural history of basal cell carcinoma of the skin
- PA34.3: Describe the distinguishing features between a nevus and melanoma. Describe the etiology, pathogenesis, risk factors, morphology, clinical features and metastases of melanoma
- PA34.4: Identify, distinguish and describe common tumors of the skin

## Microbiology

- MI4.3: Describe the etio-pathogenesis of Skin and soft tissue infections and discuss the clinical course, and the laboratory diagnosis.
- MI7.2: Describe the etio-pathogenesis and discuss the laboratory diagnosis of sexually transmitted infections. Recommend preventive measures, wherever relevant.

## Pharmacology

- PH 1.46: Describe the mechanisms of action, types, doses, side effects, indications and contraindications of anti leprotic drugs
- PH 1.57: Describe drugs used in skin disorders

## Pediatrics

• PH 31.4: Identify Atopic dermatitis and manage

#### **Remedial measures for slow learners:**

Additional clinic posting

One on one discussion and problem solving

**AETCOM modules:** 01 **Pandemic module:** NA

## Assessment:

Formative at the end of capsule course and clinical postings, and summative at the end of the course

## A. Theory

- 1. Problem solving MCQs
- 2. Structured long questions
- 3. Problem solving long questions
- 4. Short answer questions

## **B.** Practical

- 1. Short cases
- 2. Spotters

## Internal assessment: Part of General Medicine

## **Total teaching hours:**

Theory- 30 hours

Practical- 45 hours

IA marks distribution & eligibility: Refer Section II

University examinations Theory of Paper II Section II

## **Reference books (latest editions):**

- 1. Roxburg's common skin diseases, 19<sup>th</sup> edition
- 2. Jopling's handbook of leprosy, 7<sup>th</sup> edition
- 3. Tropical venereology by Arya and Osaba, 2<sup>nd</sup> edition



### BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA PSYCHIATRY CURRICULUM

## **Objectives :**

The undergraduate medical education program is designed with a goal to create an "Indian Medical Graduate" (IMG) possessing requisite knowledge, skills, attitudes, values and responsiveness, so that he or she may function appropriately and effectively as a physician of first contact of community while being globally relevant.

Topic 1- Doctor Patient Relationship and Mental health

- Establish rapport and empathy with patients
- Describe the components of communication
- Define and distinguish normality and abnormality

**Domain** - A/C & K **No. of sessions** - 1

Topic 2- Introduction to psychiatry

- Describe the growth of psychiatry as a medical speciality, its history and contribution to society
- Enumerate , describe and discuss important signs & symptoms of common mental disorders
- Describe and discuss biological, psychological& social factors& their interactions in the causation of mental disorders
- Enumerate and describe the essential investigations in patients with organic psychiatric disorders
- Enumerate the appropriate conditions for specialist referral in patients with psychiatric disorders
- Describe, discuss and distinguish psychotic & non-psychotic(Mood, anxiety, stress related disorder)

#### **Domain-** K No. of sessions - 2

Topic 3 - Alcohol and other substance use disorders

- Describe the magnitude and etiology of alcohol and substance use disorders
- Enumerate and describe the indications and interpret laboratory and other tests used in alcohol and substance abuse disorders as well as treatment of alcohol and substance abuse disorders including behavioural and pharmacologic therapy
- Enumerate and describe the pharmacologic basis and side effects of drugs used in alcohol and substance abuse
- Enumerate the appropriate conditions for specialist referral in patients with alcohol and substance abuse disorders.

### **Domain -** S/K

No. of sessions - 2

Topic 4 - Schizophrenia and other Psychotic disorder

- Classify and describe the magnitude and etiology of schizophrenia & other psychotic disorders
- Describe the treatment of schizophrenia including behavioural and pharmacologic therapy
- Enumerate and describe the pharmacologic basis and side effects of drugs used in schizophrenia
- Enumerate the appropriate conditions for specialist referral in patients with psychotic disorder.

### **Domain-** K **No. of sessions -** 3

Topic 5- Depression

- Classify and describe the magnitude and etiology of depression
- Enumerate , elicit , document clinical features in patients with depression as well as describe the indications and interpret laboratory and other test used in depression
- Describe the treatment of depression including behavioural and pharmacologic therapy
- Enumerate and describe the pharmacologic basis and side effects of drugs used in depression
- Enumerate the appropriate conditions for specialist referral in patients with depression

#### **Domain-** K No. of sessions- 2

Topic 6- Bipolar disorder and Mania

- Classify and describe the magnitude and etiology of bipolar disorders and mania
- Enumerate ,elicit ,describe, document clinical features in patients with bipolar disorders and Mania
- Describe the indications and interpret laboratory test used in bipolar disorders and Mania as well as describe treatment of bipolar disorder and Mania including behavioural and pharmacologic therapy
- Enumerate and describe the pharmacologic basis and side effects of drugs used in bipolar disorder and Mania
- Enumerate the appropriate conditions for specialist referral in patients with bipolar disorder

**Domain-** K & S **No. of sessions-** 3 Topic 7- Anxiety disorder and OCD

- Enumerate and describe the magnitude and etiology of anxiety disorders and OCD
- Enumerate , elicit , document clinical features in patients with anxiety disorders and OCD
- Describe the indications and interpret laboratory and other tests used in anxiety disorders and OCD
- Describe the treatment of anxiety disorders and OCD including behavioural and pharmacologic therapy
- Enumerate and describe the pharmacologic basis and side effects of drugs used in anxiety disorders and OCD
- Enumerate the appropriate conditions for specialist referral in anxiety disorders and OCD

**Domain-**K & S **No. of sessions -** 3

Topic 8- Stress related disorder

- Enumerate and describe the magnitude and etiology of stress related disorders
- Enumerate, elicit, document clinical features in patients with stress related disorders
- Describe the indications and interpret laboratory and other tests used in stress related disorders
- Describe the treatment of stress related disorders including behavioural and psychosocial therapy
- Enumerate and describe the pharmacologic basis and side effects of drugs used in stress related disorders
- Enumerate the appropriate conditions for specialist referral in stress disorders.

**Domain-**K & S **No. of sessions -** 2

Topic 9 - Somatoform disorders, psychosomatic, psychosexual and gender identity disorder

- Enumerate and describe the magnitude and etiology of somatoform, dissociative, conversion disorder and, psychosomatic, psychosexual and gender identity disorder
- Enumerate, elicit, document clinical features in patients with Somatoform disorders, psychosomatic, psychosexual and gender identity disorder
- Describe the indications and interpret laboratory and other tests used in Somatoform disorders , psychosomatic , psychosexual and gender identity disorder
- Describe the treatment of Somatoform disorders, psychosomatic, psychosexual and gender identity disorder disorders including behavioural and psychosocial therapy as well as pharmacological therapy

- Enumerate and describe the pharmacologic basis and side effects of drugs used in Somatoform disorders, psychosomatic, psychosexual and gender identity disorder
- Enumerate the appropriate conditions for specialist referral in Somatoform disorders , psychosomatic , psychosexual and gender identity disorder

**Domain-** K & S **No. of sessions -** 3

Topic 10- Personality disorders

- Enumerate and describe the magnitude and etiology of Personality disorders
- Enumerate, elicit, document clinical features in patients with Personality disorders
- Describe the indications and interpret laboratory and other tests used in Personality disorders
- Describe the treatment of Personality disorders including behavioural and psychosocial therapy as well as pharmacological therapy
- Enumerate and describe the pharmacologic basis and side effects of drugs used in Personality disorders
- Enumerate the appropriate conditions for specialist referral in Personality disorders

#### **Domain-** K & S **No. of sessions -** 2

Topic 11- Child and Adolescent psychiatry and Mental retardation

- Assessment of child development
- Autism spectrum disorders
- ADHD
- Intellectual Developmental disorders in children and in adulthood
- Childhood and adolescent- anxiety disorders, impulse control, disruptive, conduct disorders, mood disorders, tics

**Domain-** K

**No. of sessions -** 5

Topic 12 - Psychiatric disorders in elderly

- Dementia and other neurocognitive disorders
- Approach to Delirium in elderly
- Late onset depression and other mood disorders Late onset psychosis

**Domain-** K & S **No. of sessions -** 4

Topic 13- Psychiatric Emergencies

- Approach to violent, aggressive, agitated patients
- Approach to suicidal patients
- Approach to disaster victims

Domain- K & S No. of sessions - 1 Topic 14- Psychopharmacology Domain- K No. of sessions - 2

Topic 15- Psychotherapy Domain-K

**No. of sessions -** 2

Topic 16- Miscellaneous

- Community psychiatry (NMHP and DMHP)
- Psychiatric illness during pregnancy and postpartum period
- Forensic psychiatry
- Global and disaster psychiatry
- Complementary and alternative medicine in psychiatry

#### **Domain-** K No. of sessions- 4

Sl.	Торіс	Domain	Session
No.			( in hours)
1	Doctor Patient Relationship and Mental health	A/C	1
		K	
2	Introduction to psychiatry	K	2
3	Alcohol and other substance use disorders	K & S	2
4	Schizophrenia and other Psychotic disorder	K	3
5	Depression	K	2
6	Bipolar disorder and Mania	K & S	3
7	Anxiety disorder and OCD	K & S	3
8	Stress related disorder	K & S	2
9	Somatoform disorders , psychosomatic , psychosexual	K & S	3
	and gender identity disorder		
10	Personality disorders	K & S	2
11	Child and Adolescent psychiatry and Mental retardation	K	5
12	Psychiatric disorders in elderly	K & S	4
13	Psychopharmacology	K	2
14	Psychotherapy	K	2
15	Miscellaneous	K	4

Number of teaching hours	Theory – 40
	Clinical $-2$ Weeks for 4 <sup>th</sup> term,
	2 weeks for 6 <sup>th</sup> term,
Remedial measures for slow learners:	Group discussions & assignments
AETCOM modules :	01
Pandemic module :	NA
Assessment (Formative) :	Formative Assessment at the end of clinical postings
Internal assessment:	PART OF GENERAL MEDICINE
Template of total teaching hours: -	40 HRS
IA marks distribution & eligibility:	50 M
Topic distribution of paper I	Topics included in Paper-II
& II including AETCOM Question :	
Model question papers (100 marks)	Part of Paper-II
Log Book :	
Final exam pattern (Theory & Practical) :	Part of Paper-II (Theory)
Reference book list with latest edition :	

## **REFERENCE BOOK:**

Essentials of Psychiatry.	New Delhi: CBSPD, 2013	2013	DEPPSY	Psychiatry
Ahuja. Niraj	A Short Text Book of Psychiatry	2002	5 <sup>th</sup> ed.	DEPPSY
Murray, Robin M	Essential Psychiatry	Bangalore: Cambridge, 2010	4 <sup>th</sup> ed.	DEPPSY
	Handbook of Liaison psychiatry	Cambridge [England: Cambridge University Press, 2007.		DEPPSY
Kaplan & Shaddock's Synopsis of Psychiatry	New Delhi: Wolters Kluwer, 2015	11 <sup>th</sup> ed.	DEPPSY	Psychiatry



#### BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA GENERAL SURGERY CURRICULUM

## Goal:

Graduate capable of delivering effective first contact surgical care.

#### **Objectives:**

#### A. Knowledge

At the end of the course, the student shall be able to:

- 1. Should be competent to diagnose and describe management of common surgical diseases including emergencies.
- 2. Understand, describe and apply the kno
- 3. wledge of fluid and electrolyte therapy.
- 4. Describe indications of blood transfusion, apply it and manage complications.
- 5. Understand and describe principles of asepsis, disinfection and sterilization, take up rational drug therapy and appropriate use of antibiotics in surgical conditions.
- 6. Develop basic awareness and detect common malignancies in the country, understand principles of management and prevention.
- 7. Enumerate different types of anaesthetic agents, their indications, uses contraindications and side effects.
- 8. Commitment to advancement of quality and patient safety in surgical practice.
- 9. Understand the nature of the natural calamities and disasters, be an effective team leader or member and deliver appropriate health care during emergencies.

## **B.** Skills

At the end of the course, the student should be able to:

- 1. Examine and diagnose common surgical conditions.
- 2. Plan for various tests and their interpretation.
- 3. Diagnose and manage patients with various types of shock.
- 4. Resuscitate and manage air-way, a critically injured, burns and Patients with cardiorespiratory failure.
- 5. Resuscitate and provide basic care in poly trauma patients and refer them appropriately.
- 6. Diagnose and initiate treatment of acute surgical emergencies and refer appropriately.
- 7. Provide primary care for a patient of burns.
- 8. Management of wounds including tetanus, gas gangrene and prophylaxis.
- 9. Acquire knowledge of basic principles of operative surgery, including per operative procedures and manage patients in post-operative period.
- 10. Diagnose neonatal and paediatric surgical emergencies and provide sound primary care before referring the patient to secondary/tertiary Centres

- 11. Identify congenital anomalies and refer them for appropriate management.
- 12. In addition to the skills referred above in items he shall have observed/assisted/ performed the following during internship:
  - a) Incision and drainage of abscess
  - b) Debridement and suturing of open wounds and management of external hemorrhage
  - c) Venesection/I.V. line insertion
  - d) Excision of small lumps
  - e) Biopsy of surface malignancy
  - f) Catheterization and Nasogastric intubation
  - g) Circumcision
  - h) Vasectomy
  - i) Peritoneal and pleural aspirations
  - j) Diagnostic Proctoscopy
  - k) Hydrocele operation
  - 1) Endotracheal intubation
  - m) Tracheostomy and cricothyroidotomy
  - n) Chest tube insertion.

#### C. Affector Domain:

- 1. Understand and follow ethical approach in management of surgical conditions.
- 2. Counsel and guide the patients regarding need, options, advantages and disadvantage of common surgical procedures.
- 3. Develop overall humane approach in management of terminal care for needy patients.
- 4. Co-ordinate and organize needful services at the time of natural disasters and mass casualties.
- 5. Work in tandem with National and State level health care policies.
- 6. Understand and follow medico legal aspects in surgical care.
- 7. Develop Ability to administer informed consent and counsel patient prior to surgical procedures.

#### **D.** Integration:

The teaching should be aligned and integrated horizontally and vertically in order to provide a sound biologic basis and a holistic approach to the care of the surgical patient.

The undergraduate teaching in surgery shall be integrated to various stages with preclinical, para clinical and other clinical departments.

#### **Course content:**

Topic: Introduction of Surgery, Historical Background and Progress Made

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Sl.	Audience	Behavior	Condition	Degree	Domai	Level	Suggested	Suggeste	Departm	Integr
No.	Audience	Dellavioi	Condition	Degree	n	(K/K	Teaching	d	ents	ation
INO.					n K/S/A/	H/S/S	-			
					к/S/A/ С	н/5/5 H/P)	/Learning method	Assessme	(S)	(H/V)
					C	H/P)	method	nt		
	and 1	<b>D</b> 1 /	TT	<b>G</b> 1	TL /C		<b>.</b>	method	a	
1	2 <sup>nd</sup> phase	Describe/	How to take &	Correctly	K/S	K/KH	Lectures/	Case	Surgery	
		observe/	perform a			/S/SH	group	discussio		
		demonstrate	systematic history				discussion/	n/Viva		
			and physical				clinics	voce/		
			examination of a					OSCE		
			surgical patient.							
2	2 <sup>nd</sup> phase	interpret	Common surgical	Correctly	K/S	K/KH	Lectures/	Case	Surgery	
			patients symptoms			/S/SH	group	discussio		
			& signs into				discussion/	n/		
			diagnosis				clinics	Viva		
								voce/		
								OSCE		
3	2 <sup>nd</sup> phase	Describe	Importance of	Correctly	K	K/KH	Lectures/	Written	Surgery	
	•		investigations in				group	test/Viva	0.	
			confirming				discussion	voce		
			diagnosis of							
			surgical patients.							
	and 1	D:		D 1	17	17/1711	<b>T</b> (	<b>XX7</b> ***	G	
4	2 <sup>nd</sup> phase	Discuss	Definition of	Reasonab	K	K/KH	Lectures	Written	Surgery	
			surgery from	ly well				test/ Viva		
			historical point of					voce		
			view and							
			discussion of the							
			extent to which							
			surgical							
			approaches are							
			specific to the							
			modern world.							
5	2 <sup>nd</sup> phase	Understand	Developments in	Reasonab	K	K/KH	Lectures/	Written	Surgery	
			the objective	ly well			group	test/Viva		
			assessment of				discussion	voce		
			technical							
			proficiency of							
			surgeons.							
L			5							

Topic: Metabolic response to Injury.

Sl.		Audien	Behavior	Condition	Degree	Dom	Level	Suggeste	Suggested	Departme	Integr
No.		ce				ain	(K/K	d	Assessmen	nts	ation
						K/S/	H/S/	Teachin	t	(S)	(H/V)
						A/C	SH)	g	Method		
								/Learnin			
								g			
								method			
1	SU1.	$2^{nd}$	Describe	Basic	Correct	Κ	K/K	Lecture/	Written/	Physiolog	V
	1A	phase/		concepts	ly		Н	small	Viva voce	у	
				of				group		Patholog	
				homeostas				discussi		У	
				is.				on		Surgery	

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2	SU1. 1B	2 <sup>nd</sup> phase	Describe	Enumerate the metabolic changes in injury & their mediators.	Correct ly	K	K/K H	Lecture/ small group discussi on	Written/ Viva voce	Patholog y Surgery	V
3	SU1. 2	2 <sup>nd</sup> phase	Enumerate and describe	The factors that effect the metabolic response to injury	Correct ly	K	K/K H	Lecture/ small group discussi on	Written/ Viva voce	Physiolog y Patholog y Surgery	V
4	SU1. 3	2 <sup>nd</sup> phase	Understan d	Ebb and flow model	Correct ly	K	K/K H	Lecture/ small group discussi on	Written/ Viva voce	Physiolog y Patholog y Surgery	V

#### Topic: Wounds, Wound Healing, Wound Management and Scars

Sl.		Audien	Behavior	Condition	Degree	Domai	Level	Suggeste	Suggeste	Depar	Integr
No.		ce			8	n	(K/K	d	d	tment	ation
						K/S/A/	H/S/S	Teaching	Assessm	S	(H/V)
						С	H/ P)	/Learnin	ent	(S)	(, . )
						-		g method	method	(~)	
1	SU5.	$2^{nd}$	Describe	Describe	Correctl	K	K/KH	Lecture/	Written/	Pathol	V
	1	phase		normal	у			small	viva voce	ogy	
				wound	5			group		/Surge	
				healing				discussio		ry	
				and factors				n			
				affecting							
				wound							
				healing							
2	SU5.	2 <sup>nd</sup>	Describe	Elicit,	Correctl	K/C	K/KH	Lecture/	Written/	Pathol	V
	2	phase	/Demonstr	document	у			small	viva voce	ogy	
			ate	and				group		/Surge	
				present				discussio		ry	
				history in				n			
				a patient							
				presenting							
				with							
		nd		wound							
3	SU5.	$2^{nd}$	Describe	Differentia	Correctl	K/S/C	K/KH	Lecture/	Written/	Surge	V
	3	phase	/Demonstr	te the	У		/S/SH	small	viva voce	ry/	
			ate	various				group		forens	
				types of				discussio		ic	
				wounds,				n/ clinics		medic	
				plan ,						ine	
				observe							
				manageme							
				nt of							
4	SU5.	2 <sup>nd</sup>	Describe	wounds Discuss	Correctl	K	K/KH	Lecture/	Written/	Curren	V
4	805. 4	-	Describe	Discuss medico-		ĸ	K/KH	small		Surge	v
	4	phase		legal	У				viva voce	ry / forens	
				aspects of				group discussio		ic	
				wounds				n		medic	
				wounds						ine	
							1			me	

Topic: Asepsis, Antisepsis, Sterilisation and Universal Precautions

Sl.		Audie	Behavio	Condition	Degree	Doma	Level	Suggested	Sugges	Departm	Integrat
No.		nce	r		-	in K/S/A /C	(K/KH/ S/SH/P)	Teaching /Learning method	ted Assess ment method	ents (S)	ion (H/V)
1	SU1 4.1A	2 <sup>nd</sup> phase	Discuss	The concept of Asepsis	Correctl y	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery/ Microbi ology	V
2	SU1 4.1.B	2 <sup>nd</sup> phase	Describe	Identify the principles of surgical asepsis	Reasona bly well	К	K/KH	Lecture/ small group discussion	Written test/ Viva voce	Surgery/ Microbi ology	V
3	SU1 4.1.C	2 <sup>nd</sup> phase	Discuss/ demonst rate	select appropriate method of sterilization & dis infection	Correctl y	K/S	K/KH/S/ SH	Lecture/ small group discussion	Written test / Viva voce	Surgery/ Microbi ology	V
4	SU1 4.1. D	2 <sup>nd</sup> phase	Discuss/ demonst rate	Define Universal precautions and its importance	Correctl y	K	KH/SH	Lecture/ small group discussion	Written test / Viva voce/ OSCE	Surgery/ Microbi ology	V
5	SU1 4.1.E	2 <sup>nd</sup> phase	Describe / Observat ion	Indications for hand washing and antisepsis and describe the techniques	Reasona bly well	K/S	K/KH/S/ SH	Lecture/ small group discussion/ demonstrat ion	Written test / Viva voce/ OSCE	Surgery/ Microbi ology	V
6	SU1 4.1.F	2 <sup>nd</sup> phase	Understa nd/ Discuss	Health care worker educational training and motivational programmes	Correctl y	K	K/KH/S	Lecture/sm all group discussion	Written test / Viva voce	Surgery/ Microbi ology/ commun ity medicine	V
	SU1 4.2			Describe Surgical approaches, incisions and the use of appropriate instruments in Surgery in general.		К	КН	Lecture small group disscussion	Written viva voce		
	SU1 4.3			Describe the materials and methods used for surgical wound closure and anastomosis(s utures,knots and needles)		К	КН	Lecture small group disscussion	Written viva voce		
	SU1 4.4			Demonstrateth etechniquesofa sepsisandsutur inginasimulate denvironment		K	КН	Doap session	Skill assess ment/lo g book		

# Topic: Surgical Infections Causes and Management

S1.		Audi	Behavior	Condition	Degree	Doma	Level	Suggested	Suggested	Departme	Integr
No.		ence			U	in	(K/KH/S	Teaching	Assessme	nts	ation
						K/S/	/SH/P)	/Learning	nt	(S)	(H/V)
						A/C	,	method	Method		
1	SU6.	2 <sup>nd</sup>	Describe	Define and	Correctl	K	K/KH	Lecture	Written/	Surgery/	V
	1A	phase		describe the	у			small	viva voce	Microbiol	
				aetiology and				group		ogy	
				pathogenesis of				discussion			
				surgical site							
				infections							
2	SU6.	2 <sup>nd</sup>	Describe	Factors	Correctl	K	K/KH	Lecture	Written/	Surgery/	V
	1B	phase		affecting	у			small	viva voce	Microbiol	
				surgical site				group		ogy	
2	CI IC	2 <sup>nd</sup>	D 1	infection	0 1	К	1711/17	discussion	Written/	G (	V
3	SU6. 2A	-	Describe	Enumerate	Correctl	ĸ	KH/K	Lecture small	viva voce	Surgery/ Microbiol	v
	ZA	phase		prophylactic and therapeutic	У				viva voce	ogy/	
				antibiotics.				group discussion		pharmacol	
				plan				discussion		ogy	
				appropriate						055	
				management							
4	SU6.	2 <sup>nd</sup>	Describe	How to prevent	Correctl	K	K/KH/S	Lecture	Written/	Surgery	
	2B	phase		surgical	у			small	viva voce		
				infection				group			
								discussion/			
								clinics			
	Su7.			Describe the		K	KH	Lecture	Written/	Microbiol	Y
	1			planning and				small	viva voce	ogy	
				conduct of				group			
				surgical audit				discussion			
	Su7.			Describe the		K	KH	Lecture	Written/		Y
	2			principles and				small	viva voce		
				steps of clinical				group			
				research in				discussion			
				general surgery							

# Topic: Prevention of Surgical Site Infections

Sl. No		Audi ence	Behavi or	Condition	Degree	Dom ain K/S/ A/C	Level (K/KH/S / SH/P)	Suggested Teaching /Learning method	Suggested Assessme nt Method	Departme nts (S)	Integr ation (H/V)
1	SU6. 1A	2 <sup>nd</sup> phase	Discuss	Preoperative measures to prevent SSI	Correctly	K	KH/K/S	Lecture/ demonstra tion	Written test/Viva Voce/ OSCE	Surgery/ Microbiol ogy	V
2	SU6. 1B	2 <sup>nd</sup> phase	Describ e/ demons trate	Care in operation theatre to prevent SSI	Correctly	K	K/KH/S	Lecture/ group discussion	Written test/Viva Voce/ OSCE	Surgery/ Microbiol ogy	V
3	SU6. 1C	2 <sup>nd</sup> phase	Discuss	Role of prophylactic antibiotics in prevention of SSI	Correctly	K	KH/K	Lecture/ group discussion	Written test/Viva Voce	Surgery/ Microbiol ogy/Phar macology	V
4	SU6. 1D	2 <sup>nd</sup> phase	Discuss	Enhancement of host defence in preventing SSI	Correctly	K	K/KH	Lecture/ group discussion	Written test/Viva Voce	Surgery/ Microbiol ogy	V

5	SU6. 1E	2 <sup>nd</sup> phase	Describ e	Management of SSI	Correctly	K	K/KH	Lecture/ group	Written test/Viva	Surgery/ Microbiol	V
		r						discussion	Voce	ogy/ Pharmacol	
										ogy	

Topic: Tetanus, Gas Gangrene- Management and Prevention

Sl. No.	Audien ce	Behavior	Condition	Degree	Doma in K/S/A /C	Level (K/KH/S/ SH/ P)	Suggested Teaching /Learning method	Suggested Assessment Method	Department s (S)	Integr ation (H/V)
1	PhaseI II/I	Describe	Etiology & predisposing factors for Tetanus & its complications	Correctly	К	K/KH	Lecture/ group discussion	Written test/Viva Voce	Surgery/ medicine/ microbiol ogy	H/V
2	PhaseI II/I	Discuss	Clinical features of Tetanus. and management	Correctly	K	K/KH/S	Lecture/ group discussion	Written test/Viva Voce	Surgery/ medicine	Н
3	PhaseI II/I	Discuss	Prophylaxis against Tetanus	Correctly	К	K/KH	Lecture/ group discussion	Written test/Viva Voce	Surgery/ medicine	Н
4	PhaseI II/I	Discuss	Pathophysiology & management of gas Gangrene	Correctly	K	K/KH/S	Lecture/ group discussion	Written test/Viva Voce	Surgery/ medicine/ microbiol ogy	H/V
5	PhaseI II/I	Discuss	Prevention and control of gas Gangrene	Correctly	К	K/KH	Lecture/ group discussion	Written test/Viva Voce	Surgery/ medicine/ microbiol ogy	H/V

# Topic: Chronic Specific Infections, Tuberculosis, Filariasis and Syphilis

Sl. No.	Audien ce	Behavior	Condition	Degree	Dom ain K/S/ A/C	Level (K/KH/S /SH/P)	Suggested Teaching /Learning method	Suggested Assessme nt method	Departme nts (S)	Integr ation (H/V)
1	PhaseII I/I	Discuss	Etiology and pathogenesis of tuberculosis.	Correctly	К	К/КН	Lecture/ group discussion	Written test/Viva Voce	Surgery/ Respirator y medicine	Н
2	PhaseII I/I	Discuss	DOTS and WHO regime in treatment of tuberculosis.	Correctly	K	K/KH	Lecture/ group discussion	Written test/Viva Voce	Surgery/ Respirator y medicine	Н
3	PhaseII I/I	Discuss	MDR-TB	Correctly	К	К/КН	Lecture/ group discussion	Written test/Viva Voce	Surgery/ Respirator y medicine	Η
4	PhaseII I/I	Discuss	Etiology, clinical features and management of filariasis	Correctly	K	K/KH	Lecture/ group discussion	Written test/Viva Voce	Surgery/ medicine/ microbiol ogy	H/V
5	PhaseII I/I	Discuss	Primary, secondary and tertiary syphilis.	Correctly	К	K/KH	Lecture/ group discussion	Written test/Viva Voce	Surgery/ medicine/ dermatolo gy	Н

Sl. No.	Audien ce	Behavior	Condition	Degree	Dom ain K/S/ A/C	Level (K/KH/S /SH/P)	Suggested Teaching /Learning method	Suggested Assessme nt method	Departme nts (S)	Integr ation (H/V)
1	PhaseII I/I	Describe	Describe Subcutaneous Infections	Correctly	K	K/KH	Lecture, small group discussion	Written/ viva voce	Surgery	
2	PhaseII I/I	Describe	Describe Boil	Correctly	K	K/KH	Lecture , small group discussion	Written/ viva voce	Surgery	
3	PhaseII I/I	Describe / demonstr ate	Describe Cellulitis	Correctly	K/S	K/KH/S	Lecture , small group discussion	Written/ viva voce	Surgery	
4	PhaseII I/I	Describe / demonstr ate	Describe Necrotizing Fasciitis and Clinical Presenting features	Correctly	K/S	K/KH/S	Lecture , small group discussion	Written/ viva voce	Surgery	
5	PhaseII I/I	Describe / demonstr ate	Differentiate the various types of Hospital acquired infection.	Correctly	K/S	K/KH/S	Lecture small group discussion /clinics	Written/ viva voce	Surgery Microbiol ogy	V
6	PhaseII I/I	Describe	Importance of Hospital acquired infection	Correctly	K	K/KH	Lecture small group discussion	Written/ viva voce	Surgery Microbiol ogy	V
7	PhaseII I/I	Describe	How to prevent Hospital acquired infection	Correctly	K	K/KH	Lecture small group discussion	Written/ viva voce	Surgery Microbiol ogy	V
8	PhaseII I/I	Describe	Treatment protocol of Hospital acquired infection	Correctly	K	K/KH	Lecture small group discussion	Written/ viva voce	Surgery Microbiol ogy	V
9	PhaseII I/I	Describe	Importance of Drug resistance in Hospital acquired infection	Correctly	K	K/KH	Lecture small group discussion	Written/ viva voce	Surgery Microbiol ogy/ pharmacol ogy	V

## Topic: Boils, Cellulitis, Abscess, Necrotizing- fasciitis and Hospital Infections

# Topic: Acute Specific and Non-Specific Infections

Sl.	Audien	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departme	Integr
No.	ce				ain	(K/KH/S	Teaching	Assessme	nts	ation
					K/S/	/SH/P)	/Learning	nt	(S)	(H/V)
					A/C		method	method		
1	PhaseII	Describe	Define local and	Correctly	K	K/KH	Lecture	Written/	Surgery/	V
	I/I		systemic				small	viva voce	Microbiol	
			infections				group		ogy	
							discussion			
2	PhaseII	Describe	System specific	Correctly	Κ	K/KH	Lecture	Written/	Surgery/	V
	I/I		Infections				small	viva voce	Microbiol	
							group		ogy	
							discussion			

BLDE (Deemed to be University)

3	PhaseII I/I	Describe	Sepsis, Bacteremia and Septicemia	Correctly	K	K/KH	Lecture small group discussion	Written/ viva voce	Surgery/ Microbiol ogy	V
4	PhaseII I/I	Describe /demonst rate	Presenting Clinical signs and Symptoms	Correctly	K/S	K/KH/S	Lecture small group discussion /clinics	Written/ viva voce/ OSCE	Surgery	
5	PhaseII I/I	Describe	Specific Investigations and Radiological modalities	Correctly	K	K/KH	Lecture small group discussion	Written/ viva voce	Surgery/ Microbiol ogy/Radio logy	H/V
6	PhaseII I/I	Describe	Treatment modalities	Correctly	K	K/KH	Lecture small group discussion	Written/ viva voce	Surgery/ Medicine/ Pharmaco logy	H/V

# Topic: Antibiotic Therapy

Sl.	Audien	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departme	Integr
No.	ce				ain	(K/KH/S	Teaching	Assessme	nts	ation
					K/S/	/SH/P)	/Learning	nt	(S)	(H/V)
					A/C		method	method		
1	PhaseII	Describe	Define and	Correctly	K	K/KH	Lecture	Written/	Surgery/	V
	I/I		classify antibiotics				small	viva voce	Pharmaco	
			anubioucs				group discussion		logy	
							uiscussion			
2	PhaseII	Describe	Mechanism of	Correctly	K	K/KH	Lecture	Written/	Surgery/	V
	I/I		actions and				small	viva voce	Pharmaco	
			metabolism.				group discussion		logy	
3	PhaseII	Describe	Adverse Drug	Correctly	К	K/KH	Lecture	Written/	Surgery/	V
5	I hasen I/I	Describe	reactions	Concerny	ĸ	N/ N11	small	viva voce	Pharmaco	v
	1/1		reactions				group	viva voce	logy	
							discussion		logy	
4	PhaseII	Describe	Antibiotics in	Correctly	K	K/KH	Lecture	Written/	Surgery/	V
	I/I		Comorbidities	5			small	viva voce	Pharmaco	
			like AKI				group		logy	
							discussion			
5	PhaseII	Describe	Antibiotics Drug	Correctly	K	K/KH	Lecture	Written/	Surgery/	V
	I/I		Resistance				small	viva voce	Pharmaco	
1							group		logy	
							discussion			
6	PhaseII	Describe	Antibiotic	Correctly	K	K/KH	Lecture	Written/	Surgery/	V
	I/I		Prophylaxis				small	viva voce	Pharmaco	
							group		logy	
							discussion			

# Topic: AIDS and Hepatitis

S1.	Audien	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departme	Integr
No.	ce				ain	(K/KH/S	Teaching	Assessme	nts	ation
					K/S/	/SH/P)	/Learning	nt	(S)	(H/V)
					A/C		method	method		
1	PhaseII	Describe	Definition,	Correctly	K	K/KH/S	Lecture	Written/	Surgery/	H/v
	I/I		Etiology and				small	viva voce	Medicine/	
			Clinical signs and				group		skin &	
			symptoms and				discussion		VD/	
			management of				/		microbiol	
			HIV &AIDS.				clinics		ogy	

2	PhaseII I/I	Describe	Safe Blood Transfusion.	Correctly	K	K/KH	Lecture small group discussion	Written/ viva voce	Surgery/ pathology	V
3	PhaseII I/I	Describe	Prevention of HIV transmission.	Correctly	K	К/КН	Lecture small group discussion	Written/ viva voce	Surgery/ pathology	V
3	PhaseII I/I	Describe	Reduce stigma attached with the disease.	Correctly	K	К/КН	Lecture small group discussion	Written/ viva voce	Surgery/ pathology	V
4	PhaseII I/I	Describe	Universal precautions.	Correctly	K	K/KH/S	Lecture small group discussion	Written/ viva voce	Surgery/ microbiol ogy	V
5	PhaseII I/I	Describe	Viral hepatitis	Correctly	K	K/KH	Lecture small group discussion	Written/ viva voce	Surgery/ medicine/ microbiol ogy	H/V

# Topic: Tumors, Cysts, Ulcers, Sinuses, Fistula and Pressure Sores

S1.		Audi	Behav	Condition	Degree	Dom	Level	Suggested	Suggested	Departme	Integr
No		ence	ior			ain K/S/	(K/KH/S /SH/P)	Teaching /Learning	Assessment method	nts (S)	ation (H/V)
1	SU1 8.3 A	Phas eIII/I	Explai n	Types of swellings/ multi- disciplinary approach to the management of tumors	Correctly	A/C K/S/ C	K/KH/S/ SH	method Small group discussion /demonstr ation/clini cs	written test/viva voce/OSCE	Surgery	
2	SU1 8.3 B	Phas eIII/I	Discus s	Classification of cysts	Correctly	K/S	K/KH/S/ SH	Small group discussion /demonstr ation/clini cs	written test/viva voce/OSCE	Surgery	
3	SU1 8.4	Phas eIII/I	Discus s/ demon strate	Types of ulcers and its pathophysiology	Correctly	K/S/ C	K/KH/S/ SH	Small group discussion /demonstr ation	written test/OSCE	Surgery pathology	V
4	SU1 8.5	Phas eIII/I	Descri be	Etiopathogenesis and identify risk factors and strategies to prevent pressure sores	Correctly	K/S	K/KH/S	Small group discussion /demonstr ation	written test/OSCE	Surgery	
5	SU1 8.6	Phas eIII/I	Descri be/ demon strate	Differentiate between sinus and fistula.	Correctly	K/S	K/KH/S/ SH	Small group discussion /demonstr ation	written test/OSCE	Surgery	

# Topic: Haemorrhage and Shock

S1.		Audi	Behavi	Condition	Degree	Dom	Level	Suggested	Suggested	Departme	Integr
No.		ence	or			ain K/S/ A/C	(K/KH/ S/SH)	Teaching /Learning method	Assessme nt Method	nts (S)	ation (H/V)
1	SU2 .1A	Phas eIII/I	Commu nicate	Counsel patients &families about the treatment and prognosis of shock demonstrating empathy & care.	Correctly	K/S/ C	K/KH/S	Lecture, small group discussion ,	Written/ Viva voce	Surgery	
2	SU2 .1B			Describe Pathophysiology of shock, types of shock & principles of resuscitation including fluid replacement and monitoring.		K	КН	Lecture, small group discussion		Pathology / physiolog y	Y
3	SU2 .3			Describe the clinical features of shock and its appropriate treatment.		K	КН	Lecture, small group discussion			Y
2	SU3 .1A	Phas eIII/I	Describ e	The indications and appropriate use of blood & blood complications of blood transfusion	Correctly	K/S	K/KH/S	Lecture, small group discussion ,	Written/ Viva voce	Pathology &Surgery	V
3	SU3 .1B	Phas eIII/I	Observ e	Blood transfusion procedure its reactions & their management	Correctly	K/C/ S	K/KH/S	Lecture/ small group discussion	Viva Voce/ Written/ OSCE	Pathology & Surgery	V
4	SU3 .1C	Phas eIII/I	Counsel	Patients and family friends for blood transfusion and blood donation.	Correctly	K/C	K/KH/S	Lecture, Small group discussion	OSCE	Surgery	
5	SU2 .1B	Phas eIII/I	Discuss	Types of Hemorrhage and signs and symptoms and its management	Correctly	K	K/KH	Lecture, Small group discussion	Viva Voce/ written test	Surgery/ Emergenc y medicine	Η
6	SU2 .1C	Phas eIII/I	Discuss	Estimation of blood loss and its recognition in its management of obstetric haemorrhage	Correctly	K	K/KH/S	Group discussion	Written/vi va voce	Surgery/ Emergenc y Medicine/ Anesthesi a/ OBG	Η
7	SU3 .2D			Observe blood transfusions.		S	SH	SMALL GROUP DISSCUS SION DOAP SESSION	SKILL ASSESS MENT		

Sl. No		Audi ence	Behavi or	Condition	Degree	Dom ain K/S/ A/C	Level (K/KH/ S/SH/P)	Suggested Teaching /Learning method	Suggested Assessme nt method	Departme nts (S)	Integr ation (H/V)
1	SU1 2.1 A	Phas eIII/I	Discuss	Introduction to physiology of fluids and electrolytes	Correctly	K	K/KH	Didactic lecture/ ward rounds	Written test/viva voce	Surgery C	V
2	SU1 2.1 B	Phas eIII/I	Discuss	Dehydration and over hydration	Correctly	K	K/KH	Didactic lecture	Written test/viva voce	Surgery Physiolog y	V
3	SU1 2.1 C	Phas eIII/I	Discuss	Specific electrolyte losses	Correctly	K	K/KH	Interactive sessions/ Didactic lecture	Written test/viva voce	Surgery physiolog y	V
4	SU1 2.2 A	Phas eIII/I	Discuss	Clinical presentation and management of hypokalemia, hyponatremia, hypocalcemia, acidosis, alkalosis & acid base balance	Correctly	К	k/KH	Interactive sessions/ Didactic lecture	Written test/viva voce	Surgery physiolog y	V
5	SU1 2.2 B	Phas eIII/I	Discuss	Various replacement fluids in surgery, mode of administration & complications	Correctly	К	K/KH	Didactic lecture/ seminar	Written test/viva voce	Surgery physiolog y	V
6	SU1 2.2 C	Phas eIII/I	Discuss	Blood grouping, blood transfusion, indications and complications	Correctly	K	K/KH	Didactic lecture/ seminar	Written test/viva voce	Surgery Physiolog y pathology	V
7	SU1 2.3 A	Phas eIII/I	Discuss	Nutrition preoperative, post operative and intravenous alimentation	Correctly	K	K/KH	Didactic lecture/ seminar	Written test/viva voce	Surgery Physiolog y medicine	H/V
8	SU1 2.3 B	Phas eIII/I	Discuss	Nutritional support to surgical patients	Correctly	К	K/KH	Didactic lecture/ seminar	Written test/viva voce	Surgery physiolog y	V
9	SU1 2.4 C	Phas eIII/I	Discuss	Electrolyte changes in specific diseases- pyloric obstruction, intestinal obstruction and renal failure	Correctly	K	K/KH	Interactive sessions	Written test/viva voce	Surgery medicine	Η

# Topic: Trauma Surgery

Sl.		Audi	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departme	Integr
No		ence				ain K/S/ A/C	(K/KH/ S/SH)	Teaching /Learning method	Assessment method	nts (S)	ation (H/V)
1	SU1 7.1	Phas eIII/I	Discuss	Basic principles in management of trauma patients mechanisms and management of missile, blast and gun shot injuries	Correctly	K	K/KH	Didactic lecture	Written test/viva voce	Surgery Orthopaed ic Forensic medicine	H/V
	Su1 7.2			Demonstrate the steps in basic life support. Transport of injured patient in a simulated environment		K	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su1 7.3			Describe the principles in management of mass casualties		K	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su1 7.4			Describe pathophysiology, mechanism of head injuries		K	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su1 7.5			Describe clinical features for neurological assessment and gcs in head injuries		K	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su1 7.6			Chose appropriate investigations and discuss the principles of management of head injuries		K	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su1 7.7			Describe the clinical features of soft tissue inchoose appropriateropriate investigations and discuss the principles of management.		K	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su1 7.8			Describe the pathophysiology of chest injuries.		K	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su1 7.9			Describe the clinical features and principles of management of chest injuries.		K	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su1 7.10			Demonstrate airway maintenance. Recognize and manage tension pneumothorax, hemothorax and flail-chest in simulated environment.		S	Sh	DOAP session	Skill assessment/ log book		

	-									-	
2		Phas eIII/I	Discuss	Bites and stings	Correctly	К	K/KH	Didactic lecture	Written test/viva voce/case discussion	Surgery Medicine Forensic medicine	H/V
3		Phas eIII/I	Discuss	Infections of hands and foot	Correctly	К	K/KH	Didactic lecture/war d rounds	Written test/viva voce/case discussion	Surgery microbiol ogy	V
4	SU1 8.1	Phas eIII/I	Discuss	Common skin & subcutaneous conditions	Correctly	K	K/KH	Didactic lecture	Written test/viva voce	Surgery dermatolo gy	Н
5	SU1 8.2 SW EE	Phas eIII/I	Discuss	Skin tumors skin grafting & flaps	Correctly	K	K/KH	Interactive sessions	Written test/viva voce	Surgery Dermatolo gy pathology	H/V
6	SU4 .1A	Phas eIII/I	Discuss	Burns causes prevention and management	Correctly	K	K/KH	Interactive sessions	Written test/viva voce	Surgery	
	Su4 .1b			Elicit document and present history in a case of burns and perform physical examination. Describe pathophysiology of burns.		К	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su4 .2			Describe clinical features, diagnose type and extent of burns and plan appropriate treatment.		К	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su4 .3			Discuss the medicolegal aspects in burn injuries.		K	Kh	Lecture small group disscussion	Written/ viva voce		Y
	Su4 .4			Communicate and counsel patients and families on the outcome and rehabilitation demonstrating empathy and care.		A/c	Sh	Small group disscussion role play skills assessment	Viva voce		Y
7		Phas eiii/I	Discuss	Diagnostic imaging	Correctly	K	K/KH	Seminar/ Didactic lecture	Written test/viva voce	Surgery Radiology	Н
	Su9 .2			Biological basis for early detection of cancer and multidisciplinary approach in management of cancer		С	КН	Lecture small group disscussion	Written/ viva voce		
	Su9 .3			Communicate the results of surgical investigations and counsel the patient appropriately		С	SH	DOAP session	Skill assessment		
8	SU1 0.1	Phas eIII/I	Discuss	Common preoperative preparation and post operative complications	Correctly	K	K/KH	Interactive sessions	Written test/viva voce	Surgery medicine	Н

	CI II			Describe the store		C/A/	CII	DOAD	C1-:11	AFTCOM	V
	SU1 0.2			Describe the steps and obtain informed consent in a simulated environment		S/A/ C	SH	DOAP session	Skill assessment / log book	AETCOM	Y
	SU1 0.3			Observe common surgical procedures and assist in minor surgical procedures ; Observe emergency life saving surgical procedures.		S	КН	DOAP session	Log book		Y
	SU1 0.4			Perform basic surgical Skills such as First aid including suturing and minor surgical procedures in simulated environment		S	Р	DOAP session	Skill assessment		Y
	SU1 1.6			Describe Principles of safe General Surgery		K	КН	Lecture, small group disscusion	Written test/viva voce		Y
9	SU1 1.5	Phas eIII/I	Discuss	Anaesthesia and pain management Describe principles of providing post- operative pain relief and management Of Ochronic pain.	Correctly	K	K/KH	Didactic lecture	Written test/viva voce	Surgery anaesthesi a	Н
	SU1 1.1			Describe principles of Preoperative assessment.		K	КН	LECTURE, SMALL GROUP DISSCUSIO N	Written test/viva voce		Y
	SU1 1.2			Enumerate the principles of general, regional and local Anaesthesia.		K	КН	LECTURE, SMALL GROUP DISSCUSIO N	Written test/viva voce		Y
	SU1 1.3			Demonstrate maintenance of an airway in a mannequin or equivalent		K	SH	DOAP SESSION	SKILL ASSESSM ENT		Y
10	SU1 3.1	Phas eIII/I	Describe	Organ transplantation : basic principles	Correctly	K	K/KH	Didactic lecture	Written test/viva voce	Surgery	
	SU1 3.2			Discuss the Principles of immunosuppressive therapy.Enumerate Indications, describe surgical principles, management of organ transplantation		K	КН	LECTURE, SMALL GROUP DISSCUSI ON	Written test/viva voce	MICROBI OLOGY PHARMA COLOGY	Y
	SU1 3.3			Discuss the legal and ethical issues concerning organ donation		K	КН	LECTURE, SMALL GROUP DISSCUSI ON	Written test/viva voce	AETCOM	Y

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	SU1 3.4			Counsel patients and relatives on organ donation in a simulated environment		K	SH	DOAP SESSION	SKILL ASSESSM ENT	AETCOM	Y
11		Phas eIII/I	Describe	Diseases of muscles, tedons, bursae and fasciae	Correctly	K	K/KH	Didactic lecture	Written test/viva voce	Surgery orthopaedi c	Н

# Topic: Arterial Diseases

Sl. No.		Audi ence	Behavior	Condition	Degree	Dom ain	Level (K/KH/	Suggested Teaching	Suggested Assessme	Departme nts	Integr ation
						K/S/ A/C	S/SH/ P)	/Learning method	nt method	(S)	(H/V)
1	SU2 7.1 A	Phas e III/II	Discuss	Assessment of a case of peripheral vascular disease	Correctly	K	K/KH	Didactic lecture/ Ward rounds	Written/ viva voce/case discussion	Surgery	
2	SU2 7.1 B	Phas e III/II	Demonst rate	Clinical signs and symptoms of PVD	Correctly	K/S/ C	S/SH	ward rounds	OSCE	Surgery	
3	SU2 7.1 C	Phas e III/II	Discuss	Acute arterial occlusion, diagnosis & intial management- thrombosis and embolisim	Correctly	К	K/KH	Interactive sessions	Written/ viva voce/case discussion	Surgery	
4	SU2 7.1 D	Phas e III/II	Describe	Thromboangitis obliterans (burgers disease)	Correctly	К	K/KH	Didactic lecture	Written/ viva voce	Surgery	
5	SU2 7.1 E	Phas e III/II	Describe	Arteriosclerosis	Correctly	K	K/KH	Didactic lecture	Written/ viva voce	Surgery	
6	SU2 7.4	Phas e III/II	Describe/ demonstr ate	Gangrene-types of gangrene and management	Correctly	K/S/ C	K/KH/S /SH	Didactic lecture	Written/ viva voce/case discussion /OSCE	Surgery	
7	SU2 7.1 F	Phas e III/II	Discuss	Conservative management of ischemic limb and amputations	Correctly	K	K/KH	Didactic lecture	Written/ viva voce	Surgery	
8	SU2 7.1 G	Phas e III/II	Describe/ demonstr ate	Diabetic foot	Correctly	K/S/ C	K/KH/S /SH	Interactive sessions	Written/ viva voce/case discussion	Surgery medicine	Н
9	SU2 7.1 H	Phas e III/II	Discuss	Surgical management of ischemic limb- direct arterial surgeries	Correctly	К	K/KH	Didactic lecture	Written/ viva voce	Surgery	
10	SU2 7.1I	Phas e III/II	Describe	Vascular injuries- basic principles and management	Correctly	K	K/KH	Didactic lecture	Written/ viva voce	Surgery orthopaedi c	Н
11	SU2 7.1J	Phas e III/II	Describe	Sympathetic system-anatomy indications for cervical and lumbar sympathectomy	Correctly	K	K/KH	Didactic lecture	Written/ viva voce	Surgery anatomy	V

# Topic: Venous Diseases

Sl.		Audi	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departme	Integr
No.		ence				ain	(K/KH/	Teaching	Assessme	nts	ation
						K/S/	S/SH/P)	/Learning	nt	(S)	(H/V)
						A/C		method	method		
1	SU2	Phas	Describe/	Varicose veins	Correctly	K/S/	K/KH/S	Didactic	Written/	Surgery	
	7.5	e	demonstr			С	/SH	lecture/se	viva		
	А	III/II	ate					minar/cas	voce/case		
								e	discussion		
								discussion	/OSCE		
2	SU2	Phas	Describe	Superficial and	Correctly	K	K/KH	Didactic	Written	Surgery	
	7.6	e		deep vein				lecture	test/viva		
	Α	III/II		thrombosis-					voce/case		
				diagnosis,					discussion		
				principles of							
				therapy and							
				prevention							
3	SU2	Phas	Describe	Chronic venous	Correctly	K	K/KH	Ward	Written	Surgery	
	7.6	e		ulcers				rounds	test/viva		
	В	III/II							voce/case		
									discussion		
									/OSCE		

# Topic: Lymphatics and Lymph Nodes

Sl.		Audi	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departme	Integr
No.		ence				ain	(K/KH/	Teaching	Assessme	nts	ation
						K/S/	S/SH/P)	/Learning	nt	(S)	(H/V)
						A/C		method	method		
1	SU2	Phas	Discuss	Diagnosis and	Correctly	K	K/KH	Didactic	Written	Surgery	
	7.7	e		principles of				lecture	test/viva		
	А	III/II		management of					voce		
				lymphangitis &							
				lymphedema							
2	SU2	Phas	Describe	Diseases of	Correctly	K/S/	K/KH/S	Lecture/S	Written	Surgery	H/V
	7.7	e	/	lymph nodes		С	/SH	eminar/wa	test/viva	Medicine	
	В	III/II	demonstr					rd rounds	voce/case	pathology	
			ate						discussion		
									/OSCE		
3	SU2	Phas	Describe	Reticulosis and	Correctly	K	K/KH	Didactic	Written	Surgery	H/V
	7.7	e		lymphomas				lecture	test/viva	Medicine	
	С	III/II							voce	pathology	

# Topic: Basic Principles of Oncology

Sl.	Audi	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departme	Integr
No.	ence				ain	(K/KH/	Teaching	Assessme	nts	ation
					K/S/	S/SH/P)	/Learning	nt	(S)	(H/V)
					A/C		method	method		
1	Phas	Describe	Basic principles	Correctl	K	K/KH	Didactic	Written	Surgery	H/V
	e		of oncology	у			Lectures	test/viva	Medicine	
	III/II							voice	pathology	

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2	SU1	Phas	Describe	Basic principles	Correctl	K	K/KH/S	Didactic	Written	Surgery	
	6.1	e	/	of minimal access	у			Lectures	test/viva		
		III/II	Demonst	surgery and					voice/sma		
			rate	endoscopy					ll group		
									discussion		

# Topic: Hernia

Sl.		Audi	Behavior	Condition	Degree	Do	Level	Suggested	Suggested	Departme	Integr
No.		ence				mai	(K/KH/S	Teaching	Assessme	nts	ation
						n	/SH)	/Learning	nt	(S)	(H/V)
						K/S/		method	method		
						A/C					
1	SU2	Phas	Discuss /	Inguinal hernia,	Correctl	K/S/	K/KH/S/	Lecture/	Written	Surgery	
	8.1	e	Demonst	femoral hernia,	у	С	SH	Interactive	test/viva		
	А	III/II	rate	epigastric hernia,				session/	voice/		
				umbilical hernia,				case	small		
				ventral hernia				discussion	group		
								/ ward	discussion		
								rounds	/OSCE		

# Topic: Abdominal Wall

Sl.		Audi	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departme	Integr
No		ence			_	ain	(K/KH/	Teaching	Assessme	nts	ation
						K/S/	S/SH/P)	/Learning	nt	(S)	(H/V)
						A/C		method	method		
1	SU2	Phas	Describe	Anatomy	Correctly	K	K/KH	Didactic	Written	Surgery	V
	8.1B	e						Lectures	test/viva	Anatomy	
		III/II							voice/sma		
									ll group		
									discussion		
2	SU2	Phas	Describe	Incisions	Correctly	K/S	K/KH/S	Didactic	Written	Surgery	
	8.1C	e						Lectures/	test/viva		
		III/II						Seminar	voice/sma		
									ll group		
									discussion		
3	SU2	Phas	Describe	Burst abdomen	Correctly	K	K/KH	Didactic	Written	Surgery	
	8.1D	e						Lectures	test/viva		
		III/II							voice/sma		
									ll group		
									discussion		

# Topic: Face

Sl. No.	Audien	Behavior	Condition	Degree	Domain	Level	Suggested	Suggested	Departm	Integrat
	ce				K/S/A/	(K/KH/S	Teaching	Assessme	ents	ion
					С	/SH/ P)	/Learning	nt	(S)	(H/V)
							method	method		
1	Phase	Describe/	Rodent	Correctly	K/S/C	K/KH/S/	Didactic	Written	Surgery,	H/V
	III/II	demonstra	ulcer			SH	Lectures/	test/viva	Dermatol	
		te					Case	voce/smal	ogy	
							discussion	l group	Patholog	
								discussion	У	

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2.	Phase	Jaw	Correctly	K/S/C	K/KH/S/	Didactic	Written	Surgery	H/V
	III/II	swelling			SH	Lectures/	test/viva	Dentistry	
						Case	voce/smal	Patholog	
						discussion	l group	у	
							discussion		

# Topic: Mouth

Sl. No.	Audien	Behavior	Condition	Degree	Domain	Level	Suggested	Suggested	Departm	Integrat
	ce				K/S/A/	(K/KH/S	Teaching	Assessme	ents	ion
					С	/SH/P)	/Learning	nt	(S)	(H/V)
							method	method		
1	Phase	Describe/	Ranula and	Correctly	K/S	K/KH/S/	Didactic	Written	Surgery	Н
	III/II	demonstra	retention			SH	Lectures/	test/viva	Dentistry	
		te	cyst				case	voice/sma		
							discussion	ll group		
								discussion		
2	Phase	Describe/	Lingual	Correctly	K/S	KH/K/S/	Didactic	Written	Surgery	H/V
	III/II	demonstra	and			SH	Lectures/	test/viva	Dentistry	
		te	sublingual				case	voce/smal	ENT	
			dermoid				discussion	l group		
								discussion		
3	Phase	Describe/	Carcinoma	Correctly	K/S/C	KH/K/S/	Lecture/Inter	Written	Surgery	H/V
	III/II	demonstra	cheek			SH	active	test/viva	ENT	
		te					session/ case	voce/smal	Patholog	
							discussion	l group	у	
								discussion		

# Topic: Tongue

Sl.		Audie	Behavior	Condition	Degree	Doma	Level	Suggested	Suggested	Departm	Integr
No.		nce			_	in	(K/K	Teaching	Assessme	ents	ation
						K/S/A	H/S/S	/Learning	nt	(S)	(H/V)
						/C	H/ P)	method	method		
1	SU2	Phase	Describe/	Hyperkera	Correctly	K/S	KH/K/	Didactic	Written	Surgery	Н
	0.1	III/II	demonstrat	tosis and			S	Lectures/	test/viva	dentistry	
	А		e	leucoplaki				case	voce/	_	
				а				discussion	small		
									group		
									discussion		
2	SU2	Phase	Describe/	Ulcers of	Correctly	K/S/C	KH/K/	Interactive	Written	Surgery	H/V
	0.1	III/II	demonstrat	tongue			S/SH	session/	test/viva	Dentistr	
	В		e	and pre				seminar	voce/	У	
				cancerous				/case	small	patholog	
				lesions				discussions	group	У	
									discussion		
									/OSCE		
3	SU2	Phase	Describe/	Carcinom	Correctly	K/S/C	KH/K/	Interactive	Written	Surgery	H/V
	0.1	III/II	demonstrat	a tongue			S/SH	session/	test/viva	Dentistr	
	С		e					seminar/	voce/smal	У	
								case	l group	patholog	
								discussions	discussion	У	
									/OSCE		
	SU2			Describe							
	0.2			the							
				Principles							
				of							
				reconstruc							
				tion of							
				cleft lip							
				and palate							

# Topic: Salivary Glands

Sl. No.		Audie nce	Behaviour	Condition	Degree	Domai n K/S/A/ C	Level (K/K H/S/S H/P)	Suggested Teaching /Learning method	Suggested Assessment method	Depart ments (S)	Integrat ion (H/V)
1	SU2 1.1 A	Phase III/II	Describe	Inflammat ion	Correctl y	K	KH/K	Didactic Lectures	Written test/viva voce/small group discussion	Surgery	
2	SU2 1.1 B	Phase III/II	Describe	Salivary calculi	Correctl y	K	KH/K	Didactic Lectures	Written test/viva voce/small group discussion	Surgery dentistr y	Н
3	SU2 1.2	Phase III/II	Describe/ demonstrat e	Neoplasm s	Correctl y	K/S/C	KH/K /S/SH	Didactic Lectures/ case discussion/ seminar	Written test/viva voce/ small group discussion/ OSCE	Surgery dentistr y patholo gy	H/V

# Topic: Neck

Sl. No.	Audie nce	Behaviour	Condition	Degree	Domain K/S/A/ C	Level (K/KH /S/SH/ P)	Suggested Teaching /Learning method	Suggested Assessment method	Depart ments (S)	Integrat ion (H/V)
1	Phase III/II	Describe/ demonstrate	Differential diagnosis of swellings of the neck	Correctly	K/S/C	KH/K/ S/SH	Seminar/ lecture/ case discussion	Written test/viva voce/small group discussions /OSCE	Surgery ENT	V
2	Phase III/II	Describe/ demonstrate	Basic principles in the management of secondaries in neck	Correctly	K/S/C	KH/K/ S/SH	Seminar/lec ture/ case discussion Demonstrat ion at cadaver lab	Written test/viva voce/small group discussions /OSCE	Surgery ENT	V

# Topic: Biomedical Waste

Sl.		Audien	Behavior	Condition	Degree	Domai	Level	Suggested	Suggested	Depart	Integrat
No		ce				n	(K/KH	Teaching	Assessment	ments	ion
						K/S/A	/S/SH/	/Learning	method	(S)	(H/V)
						/C	P)	method			
1	SU1	Phase	Describe/	Types,	Correctly	K/S	KH/K/	Lecture/Int	Written	Surgery	V
	5.1	III/II	demonstrat	Potential			S/SH	eractive	test/viva	Commu	
			e	risks and				session	voce/small	nity	
				their safe				Visit to	group	medicin	
				manageme				biomedical	discussion	e/Micro	
				nt in				waste		biology	
				relation to				disposal			
				surgical				unit and			
				practice				demonstrati			
								on			

# Topic: Surgical Ethics

S1.		Audien	Behavior	Condition	Degree	Domai	Level	Suggeste	Suggested	Depart	Integrat
No.		ce			-	n	(K/KH	d	Assessment	ments	ion
						K/S/A	/S/SH/	Teaching	method	(S)	(H/V)
						/C	P)	/Learning			
								method			
1	SU8	Phase	Describe	Surgical	Correctly	K	KH/K	Didactic	Written	Surgery	
	.1A	III/II		ethics and				Lectures	test/viva		
				informed				Role	voce/small		
				consent				plays	group		
								Self-	discussion		
								directed			
								learning			
								Case			
								scenario based			
								teaching			
	SU8			The		K	КН	Lecture	Written Viva	Forensi	Y
	.1B			principles		ĸ	КΠ	Small	Voce Skill	c	I
	.1D			of Ethics as				Group	Assessment	Medici	
				it pertains				Discussio	Assessment	ne	
				to General				n		ne	
				Surgery				11			
	SU8			Demonstrat		A/C	SH	Lecture	Written Viva	Forensi	Y
	.2			e			~	Small	Voce Skill	c	-
				Professiona				Group	Assessment	Medici	
				lism and				Discussio		ne	
				empathy to				n DOAP		AETC	
				the patient				Session		OM	
				undergoing							
				General							
				Surgery							
	SU8			Discuss		A/C	KH	Lecture	Written Viva	Forensi	Y
	.3			Medico-				Small	Voce Skill	c	
				legal issues				Group	Assessment	Medici	
				in surgical				Discussio		ne	
				practice				n DOAP		AETC	
								Session		OM	

# **Topic: Investigation of surgical patient**

SU9 .1	Choose appropriate biochemical microbiology, pathological, imaging investigations and interpret the investigative data in a surgical patient	С	КН	Lecture, Small Group discussion	Written/Viv a voce	Biochemistry , Microbiology , Pathology
Su9. 2	Biological basis for early detection of cancer and multidisciplinary approach in management of cancer	С	КН	Lecture/ small group Discussio n		
Su9. 3	Communicate the results of surgical linvestigations and counsel the patient appropriately	С	SH	DOAP SESSION		

## Topic: Declaration of Death

Sl N o.	Audien ce	Behavior	Condition	Degree	Domain K/S/A/C	Level (K/KH/S /SH/P)	Suggested Teaching /Learning method	Suggested Assessment method	Depart ments (S)	Integrati on (H/V)
1	Phase III/II	Describe	Declaration of death and brain death	Correctly	K	KH/K	Interactive session	Written test/viva voce/small group discussion	Surgery Forensi c medicin e	V

# Topic: Day Care Surgery

Sl. No	COMPETENCY The student should be able to	Audi ence	Beha vior	Cond ition	Degree	Domain K/S/A/ C	Level (K/KH/ S/SH/ P)	Suggested Teaching /Learning method	Suggested Assessment method	Depart ments (S)	Integr ation (H/V)
SU 9.2	Biological basis for early detection of cancer and multidisciplinary approach in management of cancer	Phas e III/II	Descr ibe	Day care surge ry	Correctl y	К	KH/K	Didactic Lectures	Written test/viva voce/small group discussion	Surgery	
SU 9.3	Communicate the results of surgical investigations and counsel the patient appropriately					С	SH	DOAP SESSION	Skill assessment	Surgery	

# Topic: Clinical Trials

Sl. No.	Audienc e	Behavior	Condition	Degre e	Domain K/S/A/C	Level (K/KH/S /SH/P)	Suggested Teaching /Learning method	Suggested Assessment Method	Departments (S)	Integr ation (H/V)
1	Phase III/II	Describe	Clinical Trials	Correc tly	K	KH/K	Didactic Lectures	Written test/viva voce/small group discussion	Surgery	

# Topic: Development and Congenital Anomalies

No	Audien ce	Behavior	Condition	Degree	Domain K/S/A/C	Level (K/KH/S/ SH/P)	Suggested Teaching /Learning method	Suggested Assessment Method	Department s (S)	Integration (H/V)
1	Phase III/II	Describe/ demonstrate	Disease of umbilicus, desmoids tumor, developme nt and congenital anomalies	Correctly	K/S/C	KH/K/S/ SH	Didactic Lectures/ case discussion	Written test/viva voce/smal l group discussion /OSCE	Surgery pathology	V

Sl.		Audi	Behav	Condition	Degree	Domai	Level	Suggested	Suggested	Depart	Integr
No.		ence	ior		. 8	n	(K/KH/S	Teaching	Assessme	ments	ation
						K/S/A	/SH/P)	/Learning	nt	(S)	(H/V)
						/C	-	method	method		
1	SU	Phas	Descri	Cleft lip, cleft	Correctly	K/S/C	KH/K/S/	Didactic	Written	Surgery	H/V
	19.	e	be/	palate, facio			SH	Lectures/	test/viva	ENT	
	1	III/II	demon	maxillary				seminar/intera	voce/smal	dentistr	
			strate	injuries, brachial				ctive	l group	у	
				cyst and fistula,				session/case	discussion	-	
				cystic hygroma,				discussion			
				and solitary				Actual			
				lymphatic cyst,				demonstration			
				thoracic outlet				wherever			
				syndrome				possible			
	SU			Describe the		K/S	KH	Observation	MCQS		
	19.			Principles of				of the			
	2			reconstruction				procedure/vid			
				of cleft lip and				eos			
				palate							
				r							

## Topic: Faciomaxillary Anomalies and Thoracic Outlet Syndrome

## Topic: Thyroid Gland, Thyroglossal Tract and Endocrines

Sl.		Audienc	Behavior	Condition	Degree	Domai	Level	Suggested	Suggeste	Departm	Integr
No.		e				n	(K/KH/	Teaching	d	ents	ation
						K/S/A	S/SH/P)	/Learning	Assessm	(S)	(H/V)
						/C		method	ent		
<u> </u>	CT I	DI	D "	D 1	C I		17 /1711	<b>T</b>	method	G	* 7
1	SU	Phase III/II	Describe	Development,	Correctly	K	K/KH	Lectures/	Written/ Viva	Surgery,	V
	22. 1A	111/11		anatomy, physiology				group discussion	viva	anatomy,	
	IA			and				discussion	voce	physiolo	
				investigations						gy, biochemi	
				of thyroid						stry	
				gland						Sury	
	SU			Describe and		K	KH	Lectures/	Written/	Surgery,	
	22.			discuss the				group	Viva	anatomy,	
	6			clinical				discussion	voce	physiolo	
	-			features of						gy,	
				hypo – and						biochemi	
				hyperparathyr						stry	
				oidism and							
				the principles							
				of their							
				management							
2	SU	Phase	Describe	Embryology	Correctly	K	K/KH	Lectures/	Written/	Surgery,	V
	22.	III/II		of thyroid				group	Viva	anatomy	
	1B			gland,				discussion	voce		
				definition,							
				etiopathogene							
				sis, signs and							
				symptoms of thyroglossal							
				cyst and							
				fistula							
3	SU	Phase	Describe	Classification,	Correctly	K	K/KH	Lectures/	written	Surgery,	V
	22.	III/II	20001100	etiopathogene	concerty		15/1511	group	test/viva	patholog	,
	2			sis, signs and				discussion	voce	y y	
				symptoms						5	
				and							
				management							
				of goitres							

4	SU	Phase	Discuss	Etiopathogene	Correctly	K	K/KH	Lectures/	written	Surgery,	V
	22. 3A	III/II		sis, clinical features and management of solitary thyroid nodule				group discussion	test/viva voce	patholog y	·
5	SU 22. 3B	Phase III/II	Discuss	Etiopathogene sis, clinical features and management of Thyroiditis, Hashimoto's disease and Riedel's thyroiditis	Correctly	К	K/KH	Lectures/ group discussion	written test/viva voce	Surgery, patholog y	V
6	SU 22. 4	Phase III/II	Discuss	Thyroid neoplasms- clinical features, diagnosis and management of carcinoma of thyroid	Correctly	K	K/KH	Lectures/ group discussion	written test/viva voce	Surgery, patholog y	V
7	SU 22. 5	Phase III/II	Discuss	Anatomy, physiology, diseases and their management of parathyroid, adrenals and thymus	Correctly	К	K/KH	Lectures/ group discussion	written test/viva voce	Surgery, anatomy, patholog y	V
	SU 23. 1			Describe the applied anatomy of adrenal glands		K	КН	Lectures/ group discussion	written test/viva voce	Surgery, anatomy,	Y
	SU 23. 2			Describe the etiology, clinical features and principles of management of disorders of adrenal gland		K	КН	Lectures/ group discussion	written test/viva voce	GENER AL MEDICI NE	Y
	SU 23. 3			Describe the clinical features, principles of investigation and management of Adrenal tumors		К	KH	Lectures/ group discussion	written test/viva voce		Y

# Topic: Breast

Sl. No.		Audienc e	Behavior	Condition	Degree	Domai n	Level (K/KH/	Suggested Teaching	Suggested Assessme	Depart ments	Integr ation
						K/S/A /C	S/SH)	/Learning method	nt Method	(S)	(H/V)
1	SU 25. 1A	Phase III/II	Describe	Anatomy, physiology and lymphatic drainage of breast	Correctly	K	K	Lecture, small group discussion	Written/ Viva voce	Physiol ogy anatom y	H/V
2	SU 25. 1B	Phase III/II	Describe, Demonstr ate	Demonstrate the clinical examination of breast, describe self- examination of breast, and describe the investigations in a case of breast lump and screening	Correctly	K/S/C	K/KHS/ SH	Lecture, small group discussion / demonstra tion	Written/ Viva voce/ OSCE	Patholo gy Surgery	H/V
3	SU 25. 2A	Phase III/II	Describe	Describe causes of inflammation in breast and etiopathogene sis, clinical features, and management of breast abscess	Correctly	K	K	Lecture, small group discussion	Written/ Viva voce	Microbi ology Patholo gy Surgery	H/V
4	SU 25. 2B	Phase III/II	Understan d	Ebb and flow model	Correctly	K	КН	Lecture, small group discussion	Written/ Viva voce	Physiol ogy Patholo gy Surgery	H/V
5	SU 26. 1			Outline the role of surgery in the management of coronary heart disease, valvular heart diseases and congenital heart diseases		K	K	Lecture, small group discussion	Written/ Viva voce		Y
	SU 26. 2			Describe the clinical features of mediastinal diseases and the principles of management		K	K	Lecture, small group discussion	Written/ Viva voce		Y
	SU 26. 3			Describe the etiology, pathogenesis clinical feature soft tumors of lung and the principles of management		К	К	Lecture, small group discussion	Written/ Viva voce		Y

## Genito-Urinary System

Sl.	SU	Audienc	Behavior	Condition	Degree	Domai	Level	Suggested	Suggested	Depart	Integr
No	25.	e				n	(K/KH/	Teaching	Assessme	ments	ation
	1					K/S/A	S/SH/P)	/Learning	nt	(S)	(H/V)
						/C		method	method		
1	SU	Phase	Discuss	Discuss	correctly	K	K/KH	Lecture/s	Written	Surgery	H/V
	29.	III/II		symptoms of				mall	test / Viva	/	
	1A			genito urinary				group	voce	Urolog	
				system and				discussion		y/	
				investigations						Radiolo	
				of a genito						gy	
				urinary							
				system							

## **Kidneys and Ureters**

				0 11	D	р ·	T 1		<b>a</b>	<b>D</b> .	т.
Sl. No		Audienc e	Behavior	Condition	Degree	Domai n K/S/A /C	Level (K/KH/ S/SH/P)	Suggested Teaching /Learning method	Suggested Assessme nt method	Depart ments (S)	Integr ation (H/V)
1	SU 29. 1B	Phase III/II	Discuss	Enumerate congenital anomalies of kidney and describe etiopathogene sis, clinical features and management of polycystic kidney disease	correctly	К	К/КН	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V
2	SU 29. 1C	Phase III/II	Discuss	Discuss types of traumatic injuries to kidney and ureters, discuss etiopathogene sis, clinical features and management of traumatic injury to kidney and ureter	correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Urolog y	Η
3		Phase III/II	Discuss	Discuss etiopathogene sis, clinical features and management of renal failure and discuss on dialysis	correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V
4	SU 29. 4	Phase III/II	Discuss	Discuss etiopathogene sis, clinical features and management of hydronephrosi s	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V

5	SU 29. 5	Phase III/II	Discuss	Discuss etiopathogene sis, clinical features and management of renal calculi, discuss on investigative modalities	correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V
6		Phase III/II	Discuss	and surgical treatment Discuss etiopathogene sis, clinical features and management of pyonephrosis and perinephric abscess	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Microbi ology/ Urolog y	H/V
7		Phase III/II	Discuss	Discuss etiopathogene sis, clinical features and management of genito urinary tuberculosis	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Microbi ology/ Urolog y	H/V
8	SU 29. 6	Phase III/II	Discuss	Enumerate the neoplasms of the kidney, Discuss etiopathogene sis, clinical features and management of renal tumors	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V

## **Topic- 44 Urinary Bladder**

P											
Sl.		Audienc	Behavior	Condition	Degree	Domai	Level	Suggested	Suggested	Depart	Integr
No.		e				n	(K/KH/	Teaching	Assessme	ments	ation
						K/S/A	S/SH/P)	/Learning	nt	(S)	(H/V)
						/C		method	method		
1	SU	Phase	Discuss	Enumerate the	correctly	K	K/KH	Lecture/s	Written	Surgery	H/V
	29.	III/II		congenital				mall	test / Viva	/	
	8A			anomalies of				group	voce	Patholo	
				the urinary				discussion		gy/	
				bladder,						Urolog	
				Discuss						у	
				etiopathogenesi							
				s, clinical							
				features and							
				management of							
				ectopia vesicae							
2	SU	Phase	Discuss	Enumerate the	correctly	K	K/KH	Lecture/s	Written	Surgery	Н
	29.	III/II		mechanisms of				mall	test / Viva	/	
	8B			injury to the				group	voce	Urolog	
				urinary				discussion		y/	
				bladder,						Orthope	
				Discuss						dics	
				etiopathogenesi							
				s, clinical							
				features and							

				management of injury to the urinary bladder							
3	SU 29. 8C	Phase III/II	Discuss	Enumerate the causes of retention of urine, Discuss etiopathogenesi s, clinical features and management of cystitis	correctly	К	K/KH	Lecture/s mall group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V
4	SU 29. 8D	Phase III/II	Discuss	Discuss etiopathogenesi s, clinical features and management of vesical calculi	correctly	К	K/KH	Lecture/s mall group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V
5	SU 29. E	Phase III/II	Discuss	Enumerate the tumors of bladder, Discuss etiopathogenesi s, clinical features and management of tumors of bladder tumors	correctly	K	K/KH	Lecture/s mall group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V

## **Topic- 45 Prostate**

Sl.		Audienc	Behavior	Condition	Degree	Domai	Level	Suggested	Suggested	Departm	Integr
No.		e			_	n	(K/KH/	Teaching	Assessme	ents	ation
						K/S/A	S/SH/P)	/Learning	nt	(S)	(H/V)
						/C		method	method		
1	SU	Phase	Discuss	Discuss	correctly	K	K/KH	Lecture/	Written	Surgery/	H/V
	29.	III/II		surgical				small	test / Viva	Anatomy	
	9A			anatomy of the				group	voce	/ Urology	
				prostate				discussion			
2	SU	Phase	Discuss	Enumerate the	correctly	K	K/KH	Lecture/	Written	Surgery/	H/V
	29.	III/II		causes of lower				small	test / Viva	Patholog	
	9B			urinary tract				group	voce	y/	
				symptoms,				discussion		Urology	
				Discuss							
				etiopathogenesi							
				s, clinical							
				features and							
				management of							
				LUTS							
3	SU	Phase	Discuss	Discuss	correctly	K	K/KH	Lecture/	Written	Surgery/	H/V
	29.	III/II		etiopathogenesi				small	test / Viva	Patholog	
	9C			s, clinical				group	voce	у/	
				features and				discussion		Urology	
				management of							
				benign							
				prostatic							
				hyperplasia							
4.	SU	Phase	Discuss	Discuss	correctly	K	K/KH	Lecture/	Written	Surgery/	H/V
	29.	III/II		etiopathogenesi				small	test / Viva	Patholog	
	9D			s, clinical				group	voce	у/	
				features and				discussion		Urology	
				management of							
				carcinoma							
				prostate							

## Topic – 46 Urethra

Sl.		Audienc	Behavior	Condition	Degree	Domai	Level	Suggested	Suggested	Departm	Integr
No.		e			_	n	(K/KH/	Teaching	Assessme	ents	ation
						K/S/A	S/SH/P)	/Learning	nt	(S)	(H/V)
						/C		method	method		
1	SU	Phase	Discuss	Discuss	correctly	K	K/KH	Lecture/s	Written	Surgery/	Н
	29.	III/II		etiopathogenesi				mall	test / Viva	Urology	
	11			s, clinical				group	voce		
	Α			features and				discussion			
				management of							
				Urethral							
				injuries							
2	SU	Phase	Discuss	Discuss	correctly	K	K/KH	Lecture/s	Written	Surgery/	H/V
	29.	III/II		etiopathogenesi				mall	test / Viva	Patholog	
	11			s, clinical				group	voce	у/	
	В			features and				discussion		Urology	
				management of							
				urethral							
				stricture and its							
				complications							

## Penis, Testis and Scrotum

Sl.		Audienc	Behavior	Condition	Degree	Domai	Level	Suggested	Suggested	Depart	Integr
No.		e				n	(K/KH/	Teaching	Assessme	ments	ation
						K/S/A	S/SH/P)	/Learning	nt	(S)	(H/V)
	<b>a</b>			2		/C		method	method	~	
1	SU 20	Phase	Discuss	Discuss	correctly	K	K/KH	Lecture/	Written	Surgery	H/V
	30. 1A	III/II		etiopathogenesi				small	test / Viva	Patholo	
	IA			s, clinical features and				group discussion	voce	gy/	
				management of				uiscussion		gy/ Urolog	
				Phimosis,						y	
				Paraphimosis,						у	
				meatal stenosis							
				and							
				hypospadias							
2	SU	Phase	Discuss	Enumerate the	correctly	K	K/KH	Lecture/	Written	Surgery	H/V
	30.	III/II		pre-cancerous				small	test / Viva	/	
	1B			conditions of				group	voce	Patholo	
				the penis, and				discussion		gy/	
				their						Urolog	
				management						У	
3	SU	Phase	Discuss	Discuss	correctly	K	K/KH	Lecture/	Written	Surgery	H/V
5	30.	III/II	Discuss	etiopathogenesi	contectiy	ĸ	η/κη	small	test / Viva		Π/ ν
	1C	111/11		s, clinical				group	voce	Patholo	
	10			features and				discussion	voce	gy/	
				management of				uiseussien		Urolog	
				carcinoma						y	
				penis						5	
4	SU	Phase	Discuss	Discuss	correctly	K	K/KH	Lecture/	Written	Surgery	H/V
	30.	III/II		etiopathogenesi	-			small	test / Viva	/	
	2			s, clinical				group	voce	Patholo	
				features and				discussion		gy/	
				management of						Urolog	
				testicular						У	
				torsion and							
				undescended							
				testis							

5	SU 30. 4	Phase III/II	Discuss	Discuss etiopathogenesi sclinical features andmanagemen t of varicocele	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V
6	SU 30. 5	Phase III/II	Discuss	Discuss etiopathogenesi s, clinical features and management of hydrocele and its complications	correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V
7	SU 30. 3	Phase III/II	Discuss	Discuss etiopathogenesi sclinical features and management of acute epididymo orchitis	correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V
8	SU 30. 6	Phase III/II	Discuss	Discuss etiopathogenesi sclinical features andmanagemen t of testicular tumors	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Patholo gy/ Urolog y	H/V

## **Topic- Scrotum**

Sl.	Audience	Behavior	Condition	Degree	Domai	Level	Suggested	Suggested	Depart	Integr
No.					n	(K/KH/	Teaching	Assessme	ments	ation
					K/S/A	S/SH/P)	/Learning	nt	(S)	(H/V)
					/C		method	method		
1.	8 <sup>th</sup> term	Discuss	Discuss	correctly	K	K/KH	Lecture/s	Written	Surgery	H/V
	students		etiopathogenesis				mall	test / Viva	/	
			, clinical				group	voce	Patholo	
			features and				discussion		gy/	
			management of						Urolog	
			fournier's						У	
	oth		gangrene						ä	
2	8 <sup>th</sup> term	Discuss	Discuss	correctly	K	K/KH	Lecture/s	Written	Surgery	H/V
	students		etiopathogenesis				mall	test / Viva	/ D (1 1	
			, clinical features and				group	voce	Patholo	
							discussion		gу	
			management of carcinoma							
			scrotum							
3	8 <sup>th</sup> term	Describe	Describe the	correctly	К	K/KH	Lecture/s	Written	Surgery	Н
5	students	Describe	indications,	contectiy	ĸ	K/K11	mall	test / Viva		11
	students		techniques and				group	voce	Urolog	
			complications of				discussion	voce	y	
			vasectomy				discussion		y	
4	8 <sup>th</sup> term	Describe	Describe the	aarraatlee	K	K/KH	Lecture/s	Written	Surgar	Н
4	students	Describe	indications,	correctly	ĸ	Ν/ΝΠ	mall	test / Viva	Surgery	п
	students		techniques of						/ Urolog	
			recanalization				group discussion	voce	Urolog	
			recananzation				uiscussion		у	

## Introduction to Pediatric Surgery

Sl. No.	Audience	Behavior	Condition	Degree	Domai n K/S/A /C	Level (K/KH/ S/SH)	Suggested Teaching /Learning method	Suggested Assessme nt method	Depart ments (S)	Integr ation (H/V)
1	Phase III/II	Describe	Describe fluid and electrolyte management	correctly	K	K/KH	Lecture/s mall group discussion	Written test / Viva voce	Surgery / pediatri cs	Н
2	Phase III/II	Describe	Describe anatomy and physiology	correctly	K	K/KH	Lecture/s mall group discussion	Written test / Viva voce	Surgery / pediatri cs	Н

# Paediatric Trauma, Common Paediatric Surgical Conditions

Sl. No		Audien ce	Behavior	Condition	Degree	Domai n K/S/A /C	Level (K/KH/ S/SH)	Suggested Teaching /Learning method	Suggested Assessme nt method	Depart ments (S)	Integr ation (H/V)
1		Phase III/II	Discuss	Enumerate the inguino scrotal conditions in pediatric patients, discuss etiopathology clinical features and management of the conditions	Correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri c	Н
2		Phase III/II	Discuss	Enumerate the congenital anomalies of the penis in pediatric patients, discuss etiopathology clinical features and management	Correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri c	Η
3	SU 28. 2	Phase III/II	Discuss	discuss etiopathology clinical features and management of the umbilical hernia	Correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri c	Н
4		Phase III/II	Discuss	discuss etiopathology clinical features and management of the congenital hypertrophic pyloric stenosis	Correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri c	Η
5		Phase III/II	Discuss	discuss etiopathology clinical features and management of the intussusception	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri c	Н

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6	Phase III/II	Discuss	Enumerate the causes of acute abdomen in pediatric patients, discuss etiopathology clinical features and management	Correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri c	Η
7	Phase III/II	Discuss	discuss etiopathology clinical features and management of the acute appendicitis	Correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri c	Η
8	Phase III/II	Discuss	discuss etiopathology clinical features and management of the UTI	Correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / Pediatri c/ Microbi ology	H/V
9	Phase III/II	Discuss	Enumerate the causes of constipation in pediatric patients, discuss etiopathology clinical features and management of prolapse rectum	Correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri c	Η
10	Phase III/II	Describe	Describe Meckel's diverticulum and discuss conditions associated with it	Correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri cs	Н
11	Phase III/II	Describe / discussio n/ demonstr ation	Describe the measures taken in a patients with foreign body ingestion	Correctly	K/S/C	K/KH/S /SH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri cs	Η

## **Congenital Malformations**

Sl. No	Audien	Behavior	Condition	Degree	Domai	Level (K/KH/	Suggested Teaching	Suggested Assessme	Depart ments	
	ce				n K/S/A /C	S/SH)	/Learning method	nt method	(S)	
1	8 <sup>th</sup> term students	Discuss	discuss etiopathology clinical features and management of the oesophageal atresia	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri c	Н

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					-	-					versity
2		8 <sup>th</sup> term students	Discuss	discuss etiopathology clinical features and management of the intestinal atresia	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri c	Н
3		8 <sup>th</sup> term students	Discuss	discuss etiopathology clinical features and management of the intestinal malrotation	correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri cs	Н
4		8 <sup>th</sup> term students	Discuss	discuss etiopathology clinical features and management of the anorectal malformations	correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri cs	Η
5	SU 29. 3	8 <sup>th</sup> term student	Discuss	discuss etiopathology clinical features and management of the urinary tract malformations	correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri cs	Η
	SU 29. 7			Describetheprin ciplesofmanage mentofacuteand chronicretention ofurine							
6		8 <sup>th</sup> term students	Discuss	discuss etiopathology clinical features and management of the diaphragmatic hernia	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri cs	Η
7		8 <sup>th</sup> term students	Discuss	discuss etiopathology clinical features and management of the gastroschisis	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri cs	Н
8		Phase III/II	Discuss	discuss etiopathology clinical features and management of the biliary atresia	correctly	К	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri cs	Η
9		Phase III/II	Discuss	discuss etiopathology clinical features and management of the necrotizing enterocolitis	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery / pediatri cs	Н

# **Topic: 51 Paediatric Surgery Oncology**

Sl. No.	Audie nce	Beha vior	Condition	Degree	Domain K/S/A/C	Level (K/KH/S/ SH)	Suggested Teaching /Learning method	Suggested Assessment method	Departme nts (S)	
1	Phase III/II	Disc uss	discuss etiopathology clinical features and management of the neuroblastoma	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery/ pediatrics/ pathology	H/ V
2	Phase III/II	Disc uss	discuss etiopathology clinical features and management of the Wilm's tumor	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery/ pediatrics/ pathology	H/ V
3	Phase III/II	Disc uss	discuss etiopathology clinical features and management of the hepatoblastoma	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery/ pediatrics/ pathology	H/ V
4	Phase III/II	Disc uss	discuss etiopathology clinical features and management of the Rhabdomyosarcoma	correctly	K	K/KH	Lecture/ small group discussion	Written test / Viva voce	Surgery/ pediatrics/ pathology	H/ V

## Topic: Oesophagus

Sl. No.		Audien ce	Behavi our	Condition	Degre e	Dom ain K/S/ A/C	Level (K/KH/ S/SH/ P)	Suggested Teaching /Learning method	Suggested Assessment Method	Depart ments (S)	Integr ation (H/V)
1	SU28 .5A	Phase III/II	Discuss	Investigations of upper gi tract diseases- barium swallow, manometry studies, upper GI endoscopy	Correc tly	K	KH/SH	Lectures/ small group discussion / Bedside clinics	Written test/viva voce/case discussion	Surger y/ radiol ogy	Н
2	SU28 .5B	Phase III/II	Describ e	Dysphagia- differential diagnosis, investigations and management.	Correc tly	K/S	KH/SH	Lectures/ small group discussion /clinic	Written test/viva voce/case discussion	Surger y	Н
3	SU28 .5C	Phase III/II	Describ e	Achalasia cardia- definition, etiopathogenesis, clinical features and management	Correc tly	K/S	KH/SH	Lectures/ small group discussion /clinic	Written test/viva voce/case discussion	Surger y	Н
4	SU28 .5D	Phase III/II	Describ e	Reflex esophagitis and hiatus hernia	Correc tly	K	KH/SH	Lectures/ small group discussion /clinic	Written test/viva voce/case discussion	Surger y/Med icine	Н

# Topic: Stomach and Duodenum.

Sl.		Audien	Behavi	Condition	Degre	Dom	Level	Suggested	Suggested	Depart	Integr
No.		ce	our		е	ain K/S/ A/C	(K/KH/ S/SH)	Teaching /Learning method	Assessment method	ments (S)	ation (H/V)
1	SU28 .7A	Phase III/II	Describ e	Congenital hypertrophic pyloric stenosis- clinical features, differential diagnosis and management.	Correc tly	K	KH/SH	Lectures/ small group discussion /clinics	Written test/viva voce/case discussion	Surger y	Н
2	SU28 .7B	Phase III/II	Describ e	Acute dilatation of stomach	Correc tly	K	KH/SH	Lectures/ small group discussion /clinic	Written test/viva voce/case discussion	Surger y	Н
3	SU28 .7C	Phase III/II	Describ e	Gastritis types and clinical features	Correc tly	К	KH/SH	Lectures/ small group discussion /clinic	Written test/viva voce/case discussion	Surger y/ medici ne	Н
4	SU28 .8A	Phase III/II	Describ e	Peptic ulcer- etiopathogenesis, diagnosis, management and complications	Correc tly	К	KH/SH	Lectures/ small group discussion /clinics	Written test/viva voce/case discussion	Surger y/medi cine/P hysiol ogy	H/V
5	SU28 .8B	Phase III/II	Describ e	Cancer stomach- clinical features and diagnosis, principles of management	Correc tly	К	KH/SH	Lectures/ small group discussion /clinics	Written test/viva voce/case discussion	Surger y/ Pathol ogy	V
6	SU28 .8C	Phase III/II	Describ e	Miscellaneous- bezoars	Correc tly	K	KH/SH	Lectures/ small group discussion /clinics	Written test/viva voce/case discussion	Surger y	

# Topic: Spleen

Sl.		Audie	Behavi	Condition	Degree	Domai	Level	Suggested	Suggested	Depart	Integr
No.		nce	our			n	(K/KH/	Teaching	Assessment	ments	ation
						K/S/A	S/SH/P)	/Learning	Method	(S)	(H/V)
						/C		method			
1	SU2	Phase	Describ	Splenic injuries-	correctl	K/S	KH/SH	Lecture,	Written/	Surger	
	8.11	III/II	e	assessment,	у			small group	viva	у	
	А			diagnosis and initial				discussion	voce/case		
				management of					discussion		
				abdominal injuries							
2	SU2	Phase	Describ	Splenomegaly- D/D,	correctl	K	KH/SH	Lecture	Written/	Surger	
	8.11	III/II	e	causes, treatment	у			small group	viva voce	у	
	В		Demon		-			discussion,	OSCE	-	
			strate					Demonstrat			
								ion			
3	SU2	Phase	Describ	Indications and	correctl	K	KH/SH	Lecture	Written/	Surger	
	8.11	III/II	e	complications of	у			small group	viva voce	у	
	С			splenectomy				discussion			
								Demonstrat			
								ion at			
								cadaver lab			

# Topic: Liver

Sl. No.		Audie nce	Behavi or	Condition	Degree	Domai n K/S/A /C	Level (K/KH/ S/SH/P)	Suggested Teaching /Learning method	Suggested Assessment method	Depart ments (S)	Integr ation (H/V)
1	SU2 8.10 A	Phase III/II	Describ e	Surgical and functional anatomy and segments of liver-clinical aspects	Correctl y	K	KH/SH	Lectures/ small group discussion/ clinics Demonstrat ion at cadaver lab	Written test/viva voce/case discussion	Surger y/ anato my	V
2	SU2 8.10 B	Phase III/II	Describ e	Hepatocellular dysfunctions, failure and investigations	Correctl y	K	KH/SH	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion	Surger y/ medici ne/ physio logy	H/V
3	SU2 8.10 C	Phase III/II	Describ e	Liver trauma- clinical assessment, grades ,diagnosis and management	Correctl y	K/S	KH/SH	Lectures/ small group discussion/ clinics Demonstrat ion at cadaver lab	Written test/viva voce/case discussion	Surger y	
4	SU2 8.10 D	Phase III/II	Describ e/ demons trate	Amoebic and pyogenic liver abscess	Correctl y	K/S/C	K/KH/S H/S	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion	Surger y/medi cine/m icrobi ology	H/V
5	SU2 8.10 E	Phase III/II	Describ e/ demons trate	Cysts of liver, simple and hydatid	Correctl y	K/S/C	K/KH/S /SH	Lectures/ small group discussion/ clinics	Written test/viva voce/case discussion	Surger y Micro biolog y	V
6	SU2 8.10 F	Phase III/II	Describ e/ demons trate	Portal hypertension- clinical features and diagnosis, principles of management	Correctl y	K/S/C	K/KH/S H/S	Lectures/ small group discussion/ clinics	Written test/viva voce/case discussion	Surger y medici ne	Н
7	SU2 8.10 G	Phase III/II	Describ e/ demons trate	Neoplasms of liver- primary and secondary	Correctl y	K/S/C	K/KH/S H/S	Lectures/ small group discussion/ clinics Demonstrat ion at cadaver lab	Written test/viva voce/case discussion/ OSCE	Surger y Medic ine pathol ogy	H/V

# Topic: Gall Bladder

Sl. No		Audie nce	Behavi or	Condition	Degree	Domai n K/S/A /C	Level (K/KH/ S/SH/P)	Suggested Teaching /Learning method	Suggested Assessme nt method	Department s (S)	Integr ation (H/V)
1	SU2 8.12 A	Phase III/II	Describ e	Anatomy physiology and investigations	Correctly	K	KH/K	Lectures/ small group discussion	Written test/viva voce	Surgery/ Physiology/ Anatomy / radiology	H/V
2	SU2 8.12 B	Phase III/II	Describ e	Choledochal cyst-Types, clinical manifestation,	Correctly	K/S	K/KH/S	Lectures/ small group discussion	Written test/viva voce/case discussion	Surgery paediatrics	Н

## BLDE (Deemed to be University)

				differential diagnosis and management.				/clinic			
3	SU2 8.12 C	Phase III/II	Describ e	Extrahepatic biliary system, trauma and management	Correctly	K	KH/K	Lectures/ small group discussion /clinic	Written test/viva voce/case discussion	Surgery	
4	SU2 8.12 D	Phase III/II	Describ e	Cholangitis and stricture	Correctly	K	KH/K	Lectures/ small group discussion /clinic	Written test/viva voce/case discussion	Surgery/me dicine	Н
5	SU2 8.12 E	Phase III/II	Describ e	Cholelithiasis and cholecystitis	Correctly	К	KH/K/S	Lectures/ small group discussion /clinic	Written test/viva voce/case discussion	Surgery/me dicine	Н
6	SU2 8.12 F	Phase III/II	Describ e/ Demon strate	Obstructyive jaundice	Correctly	K/S/C	KH/K/S /SH	Lectures/ small group discussion /clinic	Written test/viva voce/case discussion	Surgery/me dicine/ Biochemist ry	H/V
7	SU2 8.12 G	Phase III/II	Describ e/ Demon strate	Ca gall bladder-clinical features and diagnosis, principals of management	Correctly	K/S/C	KH/K/S /SH	Lectures/ small group discussion /clinic	Written test/viva voce/case discussion	Surgery pathology	V

## Topic: Pancreas

Sl.		Audie	Behavi	Condition	Degree	Domai	Level	Suggested	Suggested	Department	Integr
No.		nce	our			n	(K/KH/	Teaching	Assessme	s	ation
						K/S/A	S/SH/P)	/Learning	nt	(S)	(H/V)
	0110	51			<i>a</i> 1	/C		method	method	a l	
1	SU2	Phase	Describ	Anatomy &	Correctly	K	KH/K	Lectures/	Written	Surgery/	V
	4.1 A	III/II	e	Physiology				small	test/viva	physiology/	
	А							group discussion	voce	anatomy	
2	SU2	Phase	Describ	Pancreatic	Correctly	К	KH/K	Lectures/	Written	Surgery	
_	4.1	III/II	e	Trauma	contenty			small	test/viva	Suigery	
	В							group	voce		
								discussion			
3	SU2	Phase	Describ	Acute	Correctly	K/S	KH/K/S	Lectures/	Written	Surgery	Н
	4.1	III/II	e/	pancreatitis				small	test/viva	medicine	
	С		demons					group	voce/case		
			trate					discussion / clinic	discussion		
4	SU2	Phase	Describ	Chronic	Correctly	K/S/C	KH/K/S	/ chine Lectures/	Written	Surgery	Н
-	4.1	III/II	e/	pancreatitis	Conteeliy	K/5/C	/SH	small	test/viva	medicine	11
	D		demons	pullereutitis			/011	group	voce/case	meanenie	
			trate					discussion	discussion		
								/clinic			
5	SU2	Phase	Describ	Pancreatic	Correctly	K/S/C	K/KH/S	Lectures/	Written	Surgery	
	4.1	III/II	e/	pseudocyst			/SH	small	test/viva		
	Е		demons					group	voce/case		
			trate					discussion	discussion		
6	SU2	Phase	Describ	Ca pancreas	Correctly	K/S	K/KH/S	/ clinic Lectures/	Written	Surgery	H/V
0	302 4.2	III/II	e/	Ca panereas	Contectiy	K/S	/SH	small	test/viva	Medicine	П/ V
	2	111/11	demons				, 511	group	voce/case	pathology	
			trate					discussion	discussion	r	
								/ clinic	/seminar		

## Topic: Peritoneum

Sl.		Audien	Behavio	Condition	Degree	Domai	Level	Suggested	Suggested	Department	Integr
No.		ce	ur		U	n	(K/KH/	Teaching	Assessme	s	ation
						K/S/A	S/SH/	/Learning	nt	(S)	(H/V)
						/C	P)	method	method		
1	SU2	Phase	Describe	Peritonitis-	Correctly	K/S/C	K/KH/S	Lectures/	Written	Surgery	Н
	8.3	III/II	/	causes,			/SH	small	test/viva	Emergency	
	А		demonstr	recognition,				group	voce/case	medicine	
			ate	diagnosis,				discussion	discussion		
				complications				/clinic			
				and principals							
				of							
2	SU2	Phase	Describe	management	Correctly	K	KH/K/S	Lectures/	Written	Surgany	
2	8.4	III/II	Describe	Sub phrenic abscess	Confectiv	ĸ	<b>КП/К/</b> З	small	test/viva	Surgery	
	о. <del>4</del> А	111/11		auscess				group	voce/case		
	11							discussion	discussion		
								/clinic	uiseussion		
3	SU2	Phase	Describe	Abdominal	Correctly	K/S/C	K/KH/S	Lectures/	Written	Surgery	H/V
	8.4	III/II	/	tuberculosis	_		/SH	small	test/viva	Medicine	
	В		demonstr					group	voce/case	pharmacolo	
			ate					discussion	discussion	gу	
								/clinic			
4	SU2	Phase	Describe	Mesenteric	Correctly	K/S/C	K/KH/S	Lectures/	Written	Surgery	
	8.4	III/II	/	cyst-Types,			/SH	small	test/viva		
	С		demonstr	clinical				group	voce/case		
			ate	features and				discussion	discussion		
				management.				/clinic			

# Topic: Intestine

Sl. No.		Audien ce	Behavior	Condition	Degree	Dom ain K/S/ A/C	Level (K/KH/ S/SH/ P)	Suggested Teaching /Learning method	Suggested Assessment method	Departm ents (S)	Integr ation (H/V)
1	SU2 8.13 A	Phase III/II	Describe	Congenital Anomalies	Correctly	K	KH/K	Lectures/ small group discussion	Written test/viva voce	Surgery anatomy	V
2	SU2 8.13 B	Phase III/II	Describe	Surgical aspects of intestinal amebiasis	Correctly	K	KH/K	Lectures/ small group discussion	Written test/viva voce/case discussion	Surgery	
3	SU2 8.13 C	Phase III/II	Describe	Crohn's disease	Correctly	K	KH/K	Lectures/ small group discussion	Written test/viva voce	Surgery	
4	SU2 8.13 D	Phase III/II	Describe	Ulcerative colitis	Correctly	K	KH/K	Lectures/ small group discussion	Written test/viva voce	Surgery	
5	SU2 8.13 E	Phase III/II	Describe	Round worm infestation and their clinical presentation	Correctly	K	KH/K	Lectures/ small group discussion	Written test/viva voce	Surgery/ parasitol ogy	V
6	SU2 8.13 F	Phase III/II	Describe / demonstr ate	Carcinoma colon- premaliganant conditions of large bowel, clinical features and diagnosis and principles of management	Correctly	K/S/ C	K/KH/S /SH	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion/ seminar	Surgery patholog y	V

7	SU2 8.13 G	Phase III/II	Describe / demonstr	Ileostomy and colostomy	Correctly	K/S	K/KH/S	Lectures/ small group discussion/	Written test/viva voce/case	Surgery	
			ate					clinic	discussion		

# Topic: Intestinal obstruction

Sl.		Audien	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departm	Integr
No.		ce			-	ain	(K/KH/	Teaching	Assessment	ents	ation
						K/S/	S/SH/P)	/Learning	method	(S)	(H/V)
						A/C		method			
1	SU2	Phase	Describe	Classification	Correctly	K	KH/K	Lectures/	Written	Surgery	
	8.14	III/II						small group	test/viva		
	А							discussion	voce		
2	SU2	Phase	Describe	Etiopathogenes	Correctly	K	KH/K	Lectures/	Written	Surgery	
	8.14	III/II		is.				small group	test/viva		
	В							discussion	voce		
3	SU2		Describe	Clinical	Correctly	K/S/	KH/K/S	Lectures/	Written	Surgery	
	8.14	Phase	/	manifestations.		С	/SH	small group	test/viva		
	С	III/II	demonstr					discussion/	voce/case		
			ate					clinic	discussion		
4	SU2	Phase	Describe	Investigations	Correctly	K/S	KH/K	Lectures/	Written	Surgery	Н
	8.14	III/II		and				small group	test/viva	radiolog	
	D			management.				discussion/	voce/case	У	
								clinic	discussion		
								Demonstrat			
								ion of			
								resection			
								and			
								anastomosi			
								s at cadaver			
								lab			

## Topic: Specific Obstructions

Sl.		Audien	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departm	Integr
No		ce				ain	(K/KH/	Teaching	Assessment	ents	ation
						K/S/	S/SH/P)	/Learning	Method	(S)	(H/V)
						A/C		method			
1	SU2	Phase	Describe	Intusussception	Correctly	K/S/	K/KH/S	Lectures/	Written	Surgery	
	8.14	III/II	/			С	/SH	small group	test/viva		
	E		demonstr					discussion/	voce/case		
			ate					clinic	discussion		
								Demonstrat			
								ion of			
								resection			
								and			
								anastomosi			
								s at cadaver			
								lab			
2	SU2	Phase	Describe	Volvulus of	Correctly	K/S/	K/KH/S	Lectures/	Written	Surgery	
	8.14	III/II	/	sigmoid and		С	/SH	small group	test/viva		
	F		demonstr	small bowel				discussion/	voce/case		
			ate					clinic	discussion		
3	SU2	Phase	Describe	Paralytic ileus	Correctly	K/S/	K/KH/S	Lectures/	Written	Surgery	Н
	8.14	III/II	/			С	/SH	small group	test/viva	medicine	
	G		demonstr					discussion/	voce/case		
			ate					clinic	discussion		

## Topic: Appendix

	- r	rppenar									
S1.		Audien	Behavior	Condition	Degree	Dom	Level	Suggested	Suggested	Departm	Integr
No		ce				ain	(K/KH/	Teaching	Assessment	ents	ation
						K/S/	S/SH/P)	/Learning	method	(S)	(H/V)
						A/C		method			
1	SU2	Phase	Describe	Appendicitis-	Correctly	K/S/	K/KH/S	Lectures/	Written	Surgery	Н
	8.15	III/II	/	differential	-	С	/SH	small group	test/viva	OBG	
	А		demonstr	diagnosis and				discussion/	voce/case	urology	
			ate	management of				clinic	discussion		
				acute							
				appendicitis							
2	SU2	Phase	Describe	Complications	Correctly	K	KH/K	Lectures/	Written	Surgery	
	8.15	III/II		& management	-			small group	test/viva		
	В			-				discussion	voce		
3	SU2	Phase	Describe	Other diseases	Correctly	K	KH/K	Lectures/	Written	Surgery	
	8.15	III/II		of appendix	5			small group	test/viva	2,1	
	С			(desirable to				discussion	voce		
	-			know)							

## Topic: Rectum and Anal Canal

Sl. No		Audien ce	Behavio ur	Condition	Degree	Dom ain	Level (K/KH/	Suggested Teaching	Suggested Assessment	Departm ents	Integr ation
		ee				K/S/ A/C	S/SH/ P)	/Learning method	method	(S)	(H/V)
1	SU2 8.16 A	Phase III/II	Describe	Normal anatomy of anorectum and its anomalies	Correctly	K	K/KH/S	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion	Surgery Anatomy paediatri cs	H/V
2	SU2 8.16 B	Phase III/II	Describe	Clinical features of anorectal diseases and investigations	Correctly	K/S/ C	K/KH/S /SH	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion	Surgery	
3	SU2 8.17 C	Phase III/II	Describe	Anorectal abscess and fistula in ano	Correctly	K/S/ C	K/KH/S /SH	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion	Surgery	
4	SU2 8.17 D	Phase III/II	Describe	Fissure and haemorrhoids- types ,clinical features and medical and surgical management	Correctly	K/S/ C	K/KH/S /SH	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion	Surgery	
5	SU2 8.17 E	Phase III/II	Describe	Prolapse of rectum-types and different surgical approaches	Correctly	K/S/ C	K/KH/S /SH	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion	Surgery	
6	SU2 8.17 F	Phase III/II	Describe	Pilonidal sinus- causes,clinical features and management.	Correctly	K/S/ C	K/KH/S /SH	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion	Surgery	
7	SU2 8.17 G	Phase III/II	Describe	Rectal polyp	Correctly	K/S/ C	K/KH/S /SH	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion	Surgery	
8	SU2 8.17 H	Phase III/II	Describe	Anorectal carcinoma- clinical features, staging and management.	Correctly	K/S/ C	K/KH/S /SH	Lectures/ small group discussion/ clinic	Written test/viva voce/case discussion	Surgery patholog y	V

1	III/	Understand	NOTES	Clearly	Κ	Κ	Lecture/	MCQS	 
	Π	the concept of					Video demo		
2	III/	Understand	Endo luminal	Clearly	Κ	Κ	Lecture/	MCQS	 
	II	the concept of	surgeries				Video demo		
3	III/	Understand	Newer gadgets in	Clearly	Κ	Κ	Lecture/	MCQS	 
	II	the concept of	surgery				Video demo		

#### Robotics, NOTES, Endo-luminal Surgeries, Newer Gadgets in Surgery

## Monitoring of teaching-learning and assessment:

### Time allotted for General Surgery year wise:

Year	Lecture hours	Small group teaching/ tutorials/ group discussion/ integrated teaching	Clinical postings (including skill lab in 2 <sup>nd</sup> year)	Self- directed learning	Total hours
II Phase	25		(4  weeks x 5 days x 3 hrs)		25+60 = 85 hrs
			/day) = 60 hrs		
III/I Phase	25	35 hrs	(4 weeks x 6 days x 3 hrs /	5 hrs	25+35+72+5 = 139 hrs
			day) = 72 hrs		
III/II	70	125 hrs	8+4 weeks = 12 weeks x 6	15	70+125+226+ 15 = 436
Phase			days x $3 hrs = 226 hrs$		hrs

## List of the topics for integrated teaching with details

SI.	Term	Торіс	Departments to be	Teaching-	Hours	Assessment
No.			included	Learning	allotted	methods
				methods		
1	Phase	Pre malignant lesions of	Pathology, Dentistry,	Integrated	2 hrs	Written
	III/I	oral cavity	Community Medicine	teaching		exam/MCQ test
2	Phase	Management of oral	Pathology, Dentistry,	Integrated	2 hrs	Written
	III/I	cavity malignancies	Community Medicine,	teaching		exam/MCQ test
			ENT			
3	Phase	Hyper thyroid diseases	Medicine,	Integrated	3 hrs	Written
	III/I		Biochemistry	teaching		exam/MCQ test
4	Phase	Cardiothoracic	Emergency medicine,	Integrated	3 hrs	Written
	III/I	resuscitation	Anesthesia,	teaching		exam/MCQ test
			Cardiology			
5	Phase	HIV and surgeon	Dermatology,	Integrated	3 hrs	Written
	III/I		Microbiology, ICTC	teaching		exam/MCQ test
6	Phase	Critically ill patients	Anaesthesia, Medicine	Integrated	3 hrs	Written
	III/II			teaching		exam/MCQ test
7	Phase	Diabetes & Diabetic foot	Biochemistry,	Integrated	3 hrs	Written
	III/II		Microbiology,	teaching		exam/MCQ test
			Medicine &			
			Physiotherapy			

8	Phase	Abdominal tuberculosis	OBGY, Urology,	Integrated	3 hrs	Written
	III/II	(other than genito urinary)	Medicine	teaching		exam/MCQ test
9	Phase	Genito urinary	OBGY, Urology,	Integrated	3 hrs	Written
	III/II	tuberculosis	Medicine	teaching		exam/MCQ test
10	Phase	Management of	Anaesthesia,	Integrated	3 hrs	Written
	III/II	Polytrauma	Orthopaedics,	teaching		exam/MCQ test
			Radiology			
11	Phase	Acid peptic diseases	Medicine, Physiology,	Integrated	3 hrs	Written
	III/II		Pathology	teaching		exam/MCQ test
12	Phase	Obstructive Jaundice	Anatomy, Pathology,	Integrated	3 hrs	Written
	III/II		Radiology, Medicine	teaching		exam/MCQ test

Each of this topic will be announced earlier, a faculty co-ordinator will coordinate with concerned departments and organize student symposium/ group discussion/ or panel discussion. Each topic will be allotted 2 hours, these will be adjusted with theory classes.

Sl.	Term	Торіс	Teaching-	Hours	Assessment
No.			Learning methods	allotted	methods
1	Phase III/I	Inguino-scrotal swelling	Tutorial	2 hrs	Written exam/MCQ test
2	Phase III/I	Lymphadenopathy	Tutorial	2 hrs	Written exam/MCQ test
3	Phase III/I	Neck swelling (midline other than thyroid)	Tutorial	2 hrs	Written exam/MCQ test
5	Phase III/I	Neck swelling (lateral)	Tutorial	2 hrs	Written exam/MCQ test
6	Phase III/I	Shock & Hemorrhage	Tutorial	2 hrs	Written exam/MCQ test
7	Phase III/I	Thyroid swelling	Tutorial	2 hrs	Written exam/MCQ test
8	Phase III/I	Breast lumps (benign)	Small group discussion	2 hrs	Written exam/MCQ test
9	Phase III/I	Breast lumps (malignant)	Tutorial	2 hrs	Written exam/MCQ test
10	Phase III/II	Scrotal swellings (benign & malignant	Small group discussion	2hrs	Written exam/MCQ test
12	Phase III/II	Right hypochondriac mass	Tutorial	2 hrs	Written exam/MCQ test
13	Phase III/II	Left-hypochondriac mass	Tutorial	2 hrs	Written exam/MCQ test
14	Phase III/II	Epigastric mass	Tutorial	2 hrs	Written exam/MCQ test
15	Phase III/II	Umbilical mass	Tutorial	2 hrs	Written exam/MCQ test

#### List of topics for small group discussion or tutorials with details

16	Phase III/II	Hypogastric/supra pubic mass	Tutorial	2 hrs	Written exam/MCQ test
17	Phase III/II	Right iliac fossa mass	Tutorial	2 hrs	Written exam/MCQ test
18	Phase III/II	Groin hernia (inguinal/femoral)	Tutorial	2 hrs	Written exam/MCQ test
19	Phase III/II	Ventral hernias	Tutorial	2 hrs	Written exam/MCQ test
20	Phase III/II	Acute retention of Urine & Hematuria	Tutorial	2 hrs	Written exam/MCQ test
21	Phase III/II	Renal mass (benign & malignant	Tutorial	2 hrs	Written exam/MCQ test
22	Phase III/II	BPH and carcinoma prostate	Tutorial	2 hrs	Written exam/MCQ test
23	Phase III/II	Varicose veins	Tutorial	2 hrs	Written exam/MCQ test
24	Phase III/II	Deep vein thrombosis	Tutorial	2 hrs	Written exam/MCQ test
25	Phase III/II	Peripheral vascular diseases (acute & chronic)	Tutorial	2hrs	Written exam/MCQ test
26	Phase III/II	Dysphagia	Tutorial	2 hrs	Written exam/MCQ test
27	Phase III/II	Neck injuries	Tutorial	2 hrs	Written exam/MCQ test
28	Phase III/II	Thoracic injuries	Tutorial	2 hrs	Written exam/MCQ test
29	Phase III/II	Carcinoma Stomach	Tutorial	2 hrs	Written exam/MCQ test
30	Phase III/II	Upper gastrointestinal bleeding &PH	Small group discussion	2 hrs	Written exam/MCQ test
31	Phase III/II	Lower gastrointestinal bleeding	Tutorial	2 hrs	Written exam/MCQ test
32	Phase III/II	Acute and chronic pancreatitis	Tutorial	2 hrs	Written exam/MCQ test
33	Phase III/II	Acute abdomen	Tutorial	2 hrs	Written exam/MCQ test
34	Phase III/II	Abdominal injuries (blunt& penetrating)	Tutorial	2 hrs	Written exam/MCQ test
35					
36	Phase III/II	Acute intestinal obstruction (adult)	Tutorial	2 hrs	Written exam/MCQ test
37	Phase III/II	Acute intestinal obstruction (paediatric)	Tutorial	2 hrs	Written exam/MCQ test
38	Phase III/II	Paediatric malignancies	Tutorial	2 hrs	Written exam/MCQ test

SI.	Term	Торіс	Hours allotted	Assessment Methods
No.				
1	Phase III/I	FNAC of Breast lump	2 hrs	Viva voce/DOPS
2	Phase III/I	Endoscopic biopsy	3 hrs	Viva voce/DOPS
3	Phase III/II	Blood transfusion	3 hrs	Viva voce/DOPS
4	Phase III/II	USG guided aspiration of cystic	3 hrs	Viva voce/DOPS
		lesions (eg. Liver abscess)		
5	Phase III/II	ICD tube insertion	3 hrs	Viva voce
6	Phase III/II	Preparation of diabetic patient for	3 hrs	Viva voce/OSCE
		elective surgery		
7	Phase III/II	Rehabilitation (visit to DDRC)	3 hrs	Viva voce/DOPS

#### List of topics for self-directed learning with details:

Learner-Doctor programme (Clinical clerkship)

The clinical postings should inculcate the learner doctor concept and plan the learning accordingly.

Year of	Focus of learner – doctor programme				
Curriculum					
Year 1	Introduction to hospital environment. Early clinical exposure. Understanding perspectives of illness				
Year 2	History taking, Physical examination. Assessment of change in clinical status, communication and patient education				
Year 3	All of the above and choice of investigations, basic procedures and continuity of care				
Year 4	All of the above and decision making, management and outcomes				

#### Learner-doctor method of clinical training (Clinical Clerkship)

#### Goal: To provide learners with experience in:

- a) Longitudinal patient care,
- b) Being part of the health care team,
- c) Hands-on care of patients in outpatient and inpatient setting.

#### Structure:

- a) The first clinical posting in second professional shall orient learners to the patient, their roles and the specialty.
- b) The learner-doctor programme will progress as outlined in Table 9.
- c) The learner will function as a part of the health care team with the following responsibilities:
  - i) Be part of the unit's outpatient services on admission days,

- ii) Remain with the admission unit until 6 PM except during designated class hours,
- iii) Be assigned patients admitted during each admission day for whom he/she will undertake responsibility, under the supervision of a senior resident or faculty member,
- iv) Participate in the unit rounds on its admission day and will present the assigned patients to the supervising physician,
- v) Follow the patient's progress throughout the hospital stay until discharge,
- vi) Participate, under supervision, in procedures, surgeries, deliveries etc. of assigned patients(according to responsibilities outlined in table 9),
- vii)Participate in unit rounds on at least one other day of the week excluding the admission day,
- viii) Discuss ethical and other humanitarian issues during unit rounds,
- ix) Attend all scheduled classes and educational activities,
- x) Document his/her observations in a prescribed log book / case record.
- xi) No learner will be given independent charge of the patient
- xii) The supervising physician will be responsible for all patient care decisions

#### Assessment:

- a) A designated faculty member in each unit will coordinate and facilitate the activities of the learner, monitor progress, provide feedback and review the log book/ case record.
- b) The log book/ case record must include the written case record prepared by the learner including relevant investigations, treatment and its rationale, hospital course, family and patient discussions, discharge summary etc.
- c) The log book should also include records of outpatients assigned. Submission of the log book/ case record to the department is required for eligibility to appear for the final examination of the subject.

#### **Clinical Classes for Beginners**

 Introductory Classes for 2 weeks during clinical postings at the beginning of 3<sup>rd</sup> term. Interactive Sessions/Didactic Lecture.

Term	Duration	Schedule
Phase II	4 weeks ( 5 days per week )	Day 1 – OPD
		Day 2 – Grand rounds
		Day 3 – OT
		Day 4 – Bed side discussion
		Day 5 – Skills lab
Phase III/I	4 weeks ( 6 days per week )	Day 1 – OPD
		Day 2 – Grand rounds
		Day 3 – OT
		Day 4 – Bed side discussion
		Day 5 – Bed side discussion
		Day 6 -Bed side discussion
		(One skills lab in 4 weeks)
Phase III/II	12 weeks ( 6 days per week )	Day 1 – OPD
		Day 2 – Grand rounds
		Day 3 – OT
		Day 4 – Bed side discussion
		Day 5 – Bed side discussion
		Day 6 -Bed side discussion
		(One skills lab every 4 weeks = total 3)

2. Learning of Basic clinical Skills using simulation at University clinical skills laboratory (1 class) per week during 3<sup>rd</sup> & 4<sup>th</sup> term clinical postings.

#### Plan for training in skills laboratory regarding psychomotor skills

Sl. No	Term	Торіс	Hours allotted	Assessment Methods
1	Phase II	<ol> <li>Breast examination</li> <li>Neck examination</li> <li>Per abdomen examination</li> <li>Per abdomen examination</li> </ol>	3 hrs each	OSCE
2	Phase III/I	IV line insertion	3 hrs	OSCE
3	Phase III/II	<ol> <li>Basic bandaging and suturing</li> <li>Ryle's tube insertion</li> <li>Per-urethral Catheterisation</li> </ol>	3 hrs each	OSCE

#### **Remedial measures for slow learners:**

Students will be considered slow learners based on the marks obtained in the theory tests, ward leaving tests and internal assessment tests. Counseling and feedback with necessary suggestions to improve will be provided. Students who need additional classes will be

grouped and repeat sessions of teaching- learning of the areas which need strengthening will be conducted. Repeat focused clinical discussions and training will be conducted.

#### **Internal Assessment**

It shall be based on day to today assessments, evaluation of assignment, presentation of seminar, clinical a Clinical presentation, problem solving exercises participation in project for health care in the community, proficiency in carrying out small research project tests etc. Regular periodic examinations should be conducted throughout the course

There shall be not less than two examinations in each clinical subject in a professional year. An end of posting clinical assessment shall be conducted for each clinical posting in each professional year.

1. In subjects that are taught at more than one phase, proportionate weightage must be given for internal assessment for each Phase. General Surgery must be assessed in second Professional, third Professional Part I and third Professional Part II, independently.

#### **Components of IA**

- i) Theory IA can include: theory tests, send ups, seminars, quizzes, interest in subject, scientific attitude etc. Written tests should have short notes and creative writing experiences.
- Practical/Clinical IA can include: practical/clinical tests, Objective Structured Clinical Examination (OSCE)/Objective Structured Practical Examination (OSPE), Directly Observed Procedural Skills (DOPS), Mini Clinical Evaluation
- iii) Exercise (mini-CEX), records maintenance and attitudinal assessment.

Day to day records and log book including certification of required skills should be given importance in internal assessment. Internal assessment should be based on competencies and skills.

The final internal assessment in a broad clinical specialty (e.g., Surgery and allied specialties etc.) shall comprise of marks from all the constituent specialties. The proportion of the marks for each constituent specialty shall be determined by the time of instruction allotted to each.

Learners must secure at least 50% marks of the total marks (combined in theory and practicals/clinical; not less than 40%marks in theory and practical/clinical separately) assigned for internal assessment in a particular subject in order to be eligible for appearing final University Examinations of that subject declared successful at the final University examination of that subject. The learner should be made aware of the results of Internal Assessment.

The results of internal assessment should be displayed on the notice board within 1-2 weeks of the test. Remedial measures should be planned for the candidates who were unable to score the required scores.

Learners must have completed the required certifiable competencies for that phase of training and completed the log book appropriate for that phase of training to be eligible for appearing at the final university examination of that subject.

Proper record of the work should be maintained, which will be the basis of internal assessment of all students and should be available for scrutiny.

The expected pattern for conduction of Internal assessment phase wise are as follows:

#### II YEAR [Second phase]

**Theory:** Two tests for- General Surgery (Including Orthopaedics, Dentistry, Anaesthesiology and Radio diagnosis)

- End of posting (EOP) examination at each clinical posting including those of allied subjects
- Clinical subject postings should be assessed at end of each posting (EOP) Theory and Practical
- There should be at least one short question from AETCOM in each subject.

#### III/I Third First Phase

**Theory:** Two tests for- General Surgery (Including Orthopaedics, Dentistry, Anaesthesiology and Radio diagnosis),

- End of posting (EOP) examination at each clinical posting including those of allied subjects
- Clinical subject postings should be assessed at end of each posting (EOP) Theory and Practical
- There should be at least one short question from AETCOM in each subject.

#### III/II Third Second Phase

- End of posting (EOP) examination at each clinical posting including those of allied subjects
- Clinical subject postings should be assessed at end of each posting (EOP) Theory and Practical
- There should be at least one short question from AETCOM in each subject.
- One of the tests in, Surgery should be prelim or pre university examination.
- Assessment of electives to be included in IA.

Designing of IA needs adequate planning and blue printing to include all the domains of competency.

The IA of broader specialties should also include marks from all the allied specialties e.g. General Surgery should include Orthopaedics, Dentistry, Anaesthesiology and Radiodiagnosis etc, so that students do not ignore these postings. The proportion of the marks for each allied specialty shall be proportionate to the time of instruction allotted to each postings. When subjects are taught in more than one phase - the assessment must be done in each phase and must contribute proportionally to final internal assessment.

- Attendance requirement is 75% in theory & 80% in Practical for eligibility to appear for the university examination.
- Internal assessment will be based on competencies and skills.
- Importance will be given to day to day performance. 20% weight age will be given to day to day assessment (Performance in Periodic tests, MCQ, Participation in Seminars and Research Projects etc and participation in the camps conducted by the department and hospital).
- At least 35% marks of the total marks independently in theory and practical assigned for internal assessment has to be obtained to be eligible to appear for university examinations. A candidate who has not secured requisite aggregate in the internal assessment may be permitted to appear for another internal examination as a remedial measure. If he/she successfully completes the remediation measures prescribed by the Institution / University as the case may be, only then he/she is eligible to appear for University Examination.
- Students must secure **at least 50% marks** of the total marks (combined in theory and practical) assigned for internal assessment to be **declared successful** at the final university examination of that subject.

#### Scheme of Examination of Surgery and its Allied Specialities

Splitting of marks in Surgery

Internal assessment: 20% as stipulated

Theory: 40 total including allied subjects, 25% of total assessment should be for allied subjects so 25% of 40=10

Gen surgery=30 allied subjects =10

30 + 10 = 40

Proposed break up for theory internal assessment for General Surgery:

Tests: best of three reduced to 20

Record book: 05

ICMR projects/Assistance to any research activity/participation in health camps = 5

20+05+05=30

Allied subjects together: 10

#### CLINICALS

20% as stipulated

Total =40

For General surgery= 30, allied subjects = 10

Ward leaving tests after clinical postings best of three = 20

Simulation/skill certification /OSCE/ +AETCOM = 10

20+10 = 30 [gen surgery] +10 [allied subjects] = 40

#### **University Examination**

Total marks: 400 (Theory 200, Clinicals =160, viva voce =40)

#### **Distribution of Marks for University Examination**

- University examinations are to be designed with a view to ascertain whether the candidate has acquired the necessary knowledge, minimal level of skills, ethical and professional values with clear concepts of the fundamentals which are necessary for him/her to function effectively and appropriately as a physician of first contact.
- Assessment shall be carried out on an objective basis to the extent possible.
- Nature of questions will include different types such as structured essays, modified essays (case based), short essays and short answers questions.
- Viva/oral examination should assess the student's ability to explain key concepts with functional and clinical correlations. Viva should focus on application and interpretation.
- The marks obtained in the viva examination will be added to the practical marks.

#### **Theory Examination**

Third Professional Part II - (Final Professional) examination shall be at the end of training (14 months including 2 months of electives) in the subjects of General Medicine, General Surgery, Obstetrics & Gynaecology and Paediatrics.

The discipline of Orthopaedics, Anaesthesiology, Dentistry and Radio diagnosis will constitute 25% of the total theory marks incorporated as a separate section in paper II of General Surgery.

- 1. Designing of question paper will take into consideration at all levels of knowledge domain e.g. Bloom's taxonomy of cognitive domain with appropriate verbs for the questions at each level to assess higher levels of learning.
- Structuring of question paper will be using combination of various types of questions e.g. structured essays (Long Answer Questions - LAQ), Short Answers Questions (SAQ) and objective type questions (e.g. Multiple Choice Questions - MCQ). Marks for each part will be indicated separately.
- Long essay question will have a structured clinical /Practical question, problem to the students and require them to apply knowledge and integrate it with disciplines. The proper marking distribution will be provided.
- MCQs will not be more than 20% weightage of total marks. One short essay (5 marks) will be preferably a case vignette.
- 5. Short question from AETCOM will also be included in theory papers in Formative as well as Summative examinations.

There will be two theory papers with hundred marks each. Total duration of Each Paper will be 03 hrs.

Theory (maximum marks)		Clinical (maximum marks)		
Paper I	100	Practical exam	160	
Paper II	100	Viva Voce	40	
Total	200	Total	200	

#### **Table Showing Scheme for Examination and Maximum Marks**

#### 1. THEORY: 200 Marks

There shall be two theory papers of 100 marks each and duration of each paper shall be 3 hours. The pattern of questions in each paper shall be as mentioned below.

#### Surgery paper I

Type of Question	Number of Question	Maximum marks for each question	Total
Multiple choice question (MCQ)	20	01	20
Structured Long essay questions (SLEQ)	2	10	20
Minimum one clinical case based question in			
each paper			

BLDE (Deemed to be University)

		Total Marks	100
Short answer questions (SAQ) -	10	03	30
Short Essay questions (SEQ)	06	05	30

Surgery paper II will have two sections of 50 marks each. The division will be as follows.

#### Section I will consist of topics under General Surgery

Type of Question		Maximum marks for each question	Total
Multiple choice question (MCQ)	10	01	10
Structured Long essay questions (SLEQ) Minimum one clinical case based question in each paper	01	10	10
Short Essay questions (SEQ)	03	05	15
Short answer questions (SAQ) -	05	03	15
		Total Marks	50

# Section II will consist of topics under allied subjects of Anaesthesiology, Radio diagnosis, Orthopaedics and Dentistry.

Type of Question	Number of Question	Maximum marks for each question	Total
Multiple choice question (MCQ)	10	01	10
Structured Long essay questions (SLEQ) Minimum one clinicalcase based question in each paper	01	10	10
Short Essay questions (SEQ)	03	05	15
Short answer questions (SAQ) -	05	03	15
		Total Marks	50

The subdivisions have to be planned. The assessment will be carried out by concerned specialists

Note: At least one question in each paper of the clinical specialties should test knowledge - competencies acquired during the professional development programme (AETCOM module); Skills competencies acquired during the Professional Development programme (AETCOM module) must be tested during clinical, practical and viva.

Clinical Examination: 160 Marks + viva voce = 40 marks = 200

Surgery: 120 marks clinicals + 30 viva voce [120+30=150]

Allied subjects: 40 marks clinicals+10 marks viva voce [40+10 = 50]

(One long case = 40 marks

2 x short cases [20 x 2 = 40]

OSCE = 4 Stations = 40

Total=120

Viva voce=3tables=30

Allied subjects: 40 marks (Two short cases, 20 marks each)

Viva Voce Examination: 10 marks

#### **Criteria for Passing University Examination**

The student must secure at least 40% marks in each of the two theory papers with minimum 50% of marks in aggregate (both papers together) to pass.

- The marks obtained in the viva examination will be added to the practical marks.
- The student must secure a minimum of 50% of marks in aggregate in the viva and practical examination (both combined) to pass.
- Students must secure at least 50% marks of the totally marks (combined in theory & practical) assigned for Internal assessment to be declared successful at the final university examination of that subject.

#### Certifiable skills under General Surgery [NMC]

- Basic suturing (I)
- Basic wound care (I)
- Basic bandaging (I)
- Incision and drainage of superficial abscess (I)
- Early management of trauma and trauma life support

#### **Optional Certifiable skills under General Surgery [BLDE DU]**

- a) Excision of small lumps
- b) Catheterization and Nasogastric intubation
- c) Circumcision

- d) Vasectomy
- e) Diagnostic Proctoscopy
- f) Hydrocele operation
- g) Endotracheal intubation
- h) Chest tube insertion.

#### **Recommended Books:**

- Bailey & Love, A Short Practice of Surgery, 27<sup>th</sup> Edition (International Student's. Edition) 2017
- Manipal manual of Surgery 5<sup>th</sup> Edition, Dr. K. Rajgopal Shenoy & Anita Nileshwar 2020,CBS Publishers.
- 3. Das S, Clinical Methods in Surgery 123<sup>th</sup> Edition 2018.
- 4. Pye's Surgical Handicraft, 22<sup>nd</sup> edition, J Kyle, JAR Smith & D Johnson

#### **Reference Books:**

- 1. Mastery of Surgery by Robert J Baker & Joseph Fischer, Vol- I & II, 7<sup>th</sup> Edition 2018
- 2. Sabiston's Text Book of Surgery, 20<sup>th</sup> Edition First south Asian edition
- 3. Farquharson's text book of operative surgery, 10<sup>th</sup> Edition.2015
- 4. Schwartz's Principles of Surgery 11<sup>th</sup> Edition 2019

## **ELECTIVE MODULES [5 MODULES]**

#### ELECTIVE MODULE ON MANAGEMENT OF BURNS (Block -2)

Preamble:

With the introduction of electives and CBME curriculum, the gates for lateral learning have opened. It is significant since the learner is exposed to actual activity and situations with clear understanding and limitations of the medical science. It also exposes the learner to the sociocultural factors affecting the management. It may inculcate empathy and humanitarian approach.

Burns management per say is a complex problem with sociocultural, financial and implications which have significant impact on clinical outcomes. Comprehensive understanding of etiopathogenesis, primary care, complex multispecialty management and rehabilitation will definitely improve care of burns patient with likely reduce incidence, morbidity and mortality too.

Name of the block	Block 2
Name of the course	Management of burns
Location	Shri B.M.Patil Medical College Hospital and Research
	Centre
Name of the internal preceptor	TejaswiniVallabha, Professor Unit chief, Unit I
	Girish Kullolli, Professor
	Vijay Huded, Asst Prof, Plastic & Reconstructive
	Surgeon
Learning objectives	1.To provide holistic care to burns patients under
	supervision
	2.to describe the etiopathogenesis, management,
	rehabilitation of burns patients
	3.To understand socio cultural, financial factors
	related to burns patients and implications
	4.to function effectively as a member of the
	multispecialty team managing burns
Maximum number of students who	2-4
can be accommodated	
simultaneously	
Pre requisites	Immunization for Hepatitis -B and Covid -19 vaccines
	Basic Life Support training.
Activities and areas of student	Timings will as specified by the institute
participation.	1. Participate in receiving the patient at casualty, out
	patients and inpatient areas and attend rounds
	2. Participate in afternoon teaching programs
	3. Participate and assist residents in work up, treatment,

	<ul> <li>cross consultation, interventions, rehabilitation and day to day care including counselling of patients and their care givers.</li> <li>4. Participate and present at least 2 case records of</li> </ul>
	patients with complete details.
	5 .Participate in relevant mortality and morbidity meetings.
Learning resources	Hamilton's text book of emergency surgery,13 <sup>th</sup> edition
	Love and Bailey's short practice of surgery27th edition
Port-folio entries required	Two completed case records which are presented.
	Documented reflections and three activities of self-
	directed learning.
Log-book	Satisfactory entries and certification by preceptor with
	M- grade
Assessment	Formative:
	1.Minimum 75% attendance as specified
	2.Submission of log book and port -folio document
	3.Presentation of two cases
	4.Block postings ending oral presentation of reflections
	and learning outcomes

#### **Electives Module 2**

Name of Block	Block 2: Clinical Specialty Experience
Name of Elective	Diabetic foot screening and comprehensive
	management guidelines
Location of hospital lab or research	BLDE (DU)Shri B.M.Patil Medical College
facility	Hospital & Research centre
Name of internal preceptor(s)	Dr. M S Kotennavar
Name of external preceptor (if any)	Physician (Diabetologist), Orthopaedician,
	Radiologist, Orthotic Technician
Learning objectives of the elective	SU27.1 Describe the etiopathogenesis, clinical
	features, investigations and principles of
	treatment of atherosclerosis in relation to
	Diabetes Mellitus
	SU18.1 Describe the pathogenesis, clinical
	features and management of various cutaneous
	and sub cutaneous infections in relation to
	Diabetes Mellitus
	SU27.1 Demonstrate correct technique of
	Diabetic foot examination
	Update knowledge regarding recent advances in
	management of Diabetic foot.

Noushan a fasta dansa shata ang ha	BLDE (Deemed to be Univers
Number of students that can be	06
accommodated in this elective	
Prerequisites for the elective	1.Students need to go through the e-resource
	materials, videos on presentation, screening,
	counselling, surgical videos pertaining to
	Diabetic foot
	2. Students need to get sensitized regarding the
	importance of preventive strategies, detection
	and management of Diabetic foot
	3.need to have knowledge about applied
	anatomy of foot and pathopysiology of Diabetic
	foot
Learning resources for students	e-Videos, Monograms on Diabetic foot,
	Contemporary management of Diabetic foot by
	Dr Sharad Pendsey, Das Clinical surgery ,Baily
	& Love's short text book of surgery latest
	edition.
List of activities in which the student will	1. Visit to the Diabetic foot clinic/ surgery
participate	OPD
F	2.Observation and participation in workup
	of OPD / IPD Diabetic foot case after taking
	adequate history and foot examination, followed
	by evaluation for diabetic neuropathy and
	vasculopathy using Biothesiometer, Harris mat
	impression, Hand held Doppler, Microbiological
	Assessment by Culture & sensitivity,
	Radiological evaluation for Osteomyelitis
	3. Writing the summary, diagnostic workup plan
	and management strategy as per Wagner's
	Diabetic foot grading of at least 5 cases
	discussed, in the log book.
	4.Participate in Grand rounds and case discussion/ Seminars
	5.Preparation of abstracts for research
	6.design and participate in patient education
	programs/ Diabetic foot prevention programme/
	Diabetic foot camps
	7. Participate in Diabetic foot awareness day
	programme
	8. Observation of surgical procedure in
	operation theatre and active participation in
	post-operative care of patient
	9. Attending conferences, symposium on
	Diabetic foot /reading and critiquing published
	articles in journal club to update knowledge.

Portfolio entries required	Yes, Case records, log book entries, presentations, reflections, etc.
Log book entry required	Yes, Completion of posting signed by preceptor with a "meets expectation '(M)' grade"
Assessment	Formative: attendance; day-to-day participation in departmental activity; / .performance of assigned tasks in Diabetic foot camp/ Diabetic foot awareness program and presentation of worked up cases in department, required portfolio and log book entries
Other comments	

## **Elective Module 3**

Name of Block	Block 2: Clinical Specialty Experience
Name of Elective	Breast cancer screening and update on
	management guidelines
Location of hospital lab or research	BLDE (DU)Shri B.M.PatilMedical College
facility	hospital
Name of internal preceptor(s)	Dr. Vijaya patil
Name of external preceptor (if any)	Pathologist, Radiologist
Learning objectives of the elective	SU25.1Describe applied anatomy and appropriate investigations for breast disease.SU25.3Describe etiopathogenesis clinical features, investigations and principles of treatment o benign and malignant tumours of breastSU25.4Demonstrate correct technique of Self breast examination in mannequin SU26.4ability to council and obtain informed consent for treatment of breast cancer Update knowledge regarding recent advances in management of breast cancer and prognostic markers.
Number of students that can be	10
accommodated in this elective	
Prerequisites for the elective	<ul> <li>1.Students need to go through the e-resource materials, videos on presentation, screening, counselling, surgical videos pertaining to breast cancer</li> <li>2. Students need to get sensitized regarding the importance of preventive strategies (triple assessment) and detection of early breast cancer.</li> <li>3.need to have knowledge about applied anatomy and pathological aspect of breast cancer,</li> </ul>

Learning resources for students	e-Videos Das Surgical Books Baily & Love
	Surgical books
List of activities in which the student will participate	<ul> <li>1.Visit to the Breast clinic/ surgery opd</li> <li>2.Observation and participation in workup</li> <li>of OPD / IPD breast lump case after taking</li> <li>adequate history and breast examination,</li> <li>followed by radiological evaluation through</li> <li>mammography/ MRI and pathological</li> <li>evaluation through FNAC for adequate staging</li> <li>3. Writing the summary diagnostic workup plan</li> <li>and management strategy as per staging) of at</li> <li>least 5 cases discussed in the log book.</li> <li>4.Participate in Grand rounds and case</li> <li>discussion/ Seminars</li> <li>5.Preparation of abstracts for research</li> <li>6.design and participate in patient education</li> <li>programs/ breast cancer prevention programme/</li> <li>breast camps</li> <li>7. Participate in breast cancer awareness day</li> <li>programme &amp; as a part of health camps.</li> <li>8. Observation of surgical procedure in</li> <li>operation theatre and active participation in</li> <li>post-operative care of patient</li> </ul>
	9. Attending conferences, symposium on breast cancer /reading and critiquing published articles
	in journal club to update knowledge.
Portfolio entries required	Yes, Case records, log book entries, presentations, reflections, etc.
Log book entry required	Yes, Completion of posting signed by preceptor with a "meets expectation '(M)' grade"
Assessment	Formative: attendance; day-to-day participation in departmental activity; / .performance of assigned tasks in Breast camp/ Breast cancer awareness program and presentation of worked up cases in department, required portfolio and log book entries
Other comments	

### **Elective Module 4**

Name of Dia da		
Name of Block	Block 2: Clinical Speciality Experience	
Name of Elective	Management of Head Injury	
Location of hospital lab or research	BLDE (DU)Shri B.M.Patil Medical College	
facility	Hospital & Research centre	
Name of internal preceptor(s)	Dr. M.B.Patil	
Name of external preceptor (if any)	DR B.T.Badadal	
Learning objectives of the elective	1)Understanding the importance of Golden	
	Hour following trauma	
	2)Assessment of Severity of head injury	
	3)Resuscitation and Stabilizing the patient with	
	head injury	
	4)Understanding the principles of management	
	of head injury	
Number of students that can be	04	
accommodated in this elective		
Prerequisites for the elective	1.Students need to go through the book	
	chapters, e-resource materials, videos on	
	assessment of Head injury(Glasgow coma scale)	
	2.need to have knowledge about applied	
	anatomy of brain and pathophysiology of raised	
	intracranial tension	
Learning resources for students	-Bailey and Loves short practice s of surgery-	
	27 <sup>th</sup> edition	
	- e Videos	
List of activities in which the student will	1.Visit to the casualty	
participate	2. Observation and participation in assessing,	
	resuscitation of patient of head injury.	
	3) observation and assisting in the control of	
	scalp bleeding	
	4)assistance in patient transport to Ct scan/ICU	
	5)Observation and follow up in workup plan	
	and management strategy	
	6)Participate in Grand rounds and case	
	discussion/ Seminars	
	7). Participate in patient education programs &	
	head injury awareness days	
Portfolio entries required	Yes, Case records, log book entries,	
	presentations,	
Log book entry required	Yes, Completion of posting signed by preceptor	
	with a "meets expectation '(M)' grade"	
Assessment	Formative: attendance; day-to-day participation	
	in departmental activity; / .performance of	
	assigned tasks in awareness program and	
	presentation of worked up cases in department,	
	required portfolio and log book entries	
Other comments		

### **Elective Module 5**

Elective Module 5	
Name of Block	Block 2: Clinical Speciality Experience
Name of Elective	Management of Head & Neck Cancer
Location of hospital lab or research facility	BLDE (DU)Shri B.M.Patil Medical College
	Hospital & Research centre
Name of internal preceptor(s)	Dr. Ramakanth Baloorkar
Name of external preceptor (if any)	Dr. Shailesh Kannur
Learning objectives of the elective	1)Assessment of Etio- Pathogenesis of Head & Neck Cancer
	2)To know the modes of spread and staging
	of Head & Neck Cancer
	3)Understanding the principles of
	management of Head & Neck Cancer
Number of students that can be	05
accommodated in this elective	
Prerequisites for the elective	1.Students need to go through the book
rerequisites for the elective	chapters, e-resource materials, videos on
	assessment of Head & Neck Cancer
	2. Need to have knowledge about applied
	anatomy of Head & Neck. Etio Pathogenesis
	and Management of Head & Neck Cancer.
Learning resources for students	-Bailey and Loves short practice s of surgery-
	27 <sup>th</sup> edition
	- e Videos
	- Mastery of Surgery
	- Stell and Maran
List of activities in which the student will	1.Visit to the OPD /IPD
participate	2. Observation and participation in assessing,
	staging of Head & Neck Cancer.
	3) Observation and assisting in the staging
	and management of Head & Neck Cancer
	4) Observation and follow up
	5)Participate in Grand rounds and case
	discussion/ Seminars
	6). Participate in patient education programs
	of Head & Neck Cancer
Portfolio entries required	Yes, Case records, log book entries,
	presentations,
Log book entry required	Yes, Completion of posting signed by
	preceptor with a "meets expectation '(M)'
	grade"

Assessment	Formative: attendance; day-to-day	
	participation in Departmental activity; /	
	performance of assigned tasks in awareness	
	program and presentation of worked up cases	
	in Department, required portfolio and log	
	book entries	
Other comments		

# **AETCOM MODULE DETAILS FOR 4<sup>th</sup> year**

Total hours allotted for 4<sup>th</sup> year is 44 hrs.28 hours of lectures and 16 hours of self -directed learning =44. This is combined hours for all 4<sup>th</sup> year subjects

Subject	Lecture hours	Self -directed learning hours
Gen medicine	7	4
Gen surgery	7	4
OBGY	7	4
Pediatrics	4	2
Orthopedics	3	2
Total	28	16

So dedicated time for AETCOM teaching for Gen Surgery is 7+4=11 hours

There can be 4 learning sessions in various domains with 3hours for each session.

- 1. Taking consent for a major surgical procedure
- 2. Breaking bad news.
- 3. Empathy in terminally ill individuals.

### **Optional module:**

Counseling regarding management and foot care in diabetic foot patients.

### The relevant competency statements enumerated in the AETCOM module are:

	18. Identify, discuss and defend, medico-legal, socio-cultural and ethical issues as pertain to consent for surgical procedures	they K&KH
	23 Demonstrate ability to communicate to patients in a patient, respectful, non-thr non-judgemental and empathetic manner	eatening, S SH
	33 Administer informed consent and appropriately address patient queries to a pat undergoing a surgical procedure in a simulated environment	ient S SH
	34 Communicate diagnostic and therapeutic options to patient and family in a simular environment	ulated S SH
	35 Communicate care options to patient and family with a terminal illness in a simenvironment	nulated S SH
16	eral Surgery	

40 Demonstrate empathy in patient encounters.

Relevant GMR Competencies are: 2.1, 2.3, 2.5, 3.34 etc

### Plan for implementation of AETCOM Modules

- 1. Background
- 2. Define objectives and state the competency
- 3. Lesson plan with teaching-learning methods
- 4. Assessment method

### Module 1: Taking appropriate informed consent for a major surgical procedure.

### **Competencies:**

- A. The student should be able to communicate diagnostic and therapeutic options to a patient with multinodular goitre and counsel them for surgery in a simulated environment.
- B. Administer appropriate informed consent and address the queries of the patient undergoing surgery effectively in a simulated environment to a standardized patient.

### **Back ground:**

A middle aged lady, teacher by occupation is diagnose with multinodular goitre with pressure symptoms. As per information, the swelling though present for last 10 years, never troubled her. Of late, in last few months there is difficulty in swallowing. She had consulted her local doctor who referred her to a surgeon. He examined her and advised investigations. After going through the reports the necessity for surgery was evident. This needs to be communicated to the patient.

Lesson plan: Half a hour session of small lecture regarding the scientific basis for surgery.

One hour of planned self-directed learning regarding details of the procedure, pros and cons and likely complications and final outcome.

Half an hour session of actual counselling to a standardized patient in a simulated environment.

Half an hour of review and feedback by faculty.

Half an hour session of assessment in the form of role play.

Total three hours.

### Module 2: Breaking bad news.

Competencies:

23: Demonstrate ability to communicate with patients in a patient, respectful, non-threatening and non-judgemental and empathetic manner.

40. Demonstrate empathy in patient encounters.

Optional non-core competency: Discuss rehabilitation options post procedure.

Background: A middle aged man, a manual labourer by occupation is admitted with severe pain in right lower limb since 2-3 weeks. He is known chronic smoker and diabetic. On evaluation, he is diagnosed with critical limb ischemia and needs above knee amputation for prevention of progression to gangrene.

Objective is to communicate the permanent loss of limb to save his life.

Lesson plan: Short lecture session by faculty regarding scientific basis for amputation and its consequences for half an hour.

One hour of self-directed learning to understand the procedure, consequences and likely economic, sociocultural and physical loss with dependency.

Conduct the session in the form of role play in simulated environment for half an hour.

Review and feedback for 15 minutes.

Group discussion regarding options for rehabilitation, government support information and support from non-governmental organisations for half an hour.

Assessment in the form of short essay questions for half an hour.

**Module 3**: Optional Non-Core Competency Counseling regarding management and foot care in diabetic foot patients.

Background:

A 55 year old lady was admitted with infected wound of right foot. She is a known diabetic since 15 years and has reduced sensation over her both feet for last 2-3 years. She was on oral drugs till recently but had to be switched over to insulin therapy after admission. After around a month of treatment the wound has healed now and she is ready for discharge.

Competency: Demonstrate ability to explain patient regarding appropriate control of the diabetes mellitus, insulin therapy, follow appropriate routine foot care and when to attend the diabetic foot clinic.

Lesson plan: Lecture by faculty regarding diabetic foot complications, outcome, and foot care routine with importance and precautions to be taken. One hour.

Actual session of counseling the patient/ group of diabetic foot individuals or patients attending diabetic clinic with help of audio visual aids. 45 minutes

Feedback and review 15 minutes

Assessment: Feedback from the attendees and patients using checklist regarding understanding and utility for the educational session.

Module 4: Empathy in terminally ill individuals.

Suggested use of Module 4.4: Case studies in ethics, empathy and the doctor-patient relationship from the AETCOM Booklet.

General Surgery

# BLDE (Deemed to be University)

### MODEL QUESTION PAPER PAPER- I

### Max Marks – 100 Hours

### I. Structured Long Essay Questions

- 1. Discuss the classification, etiology, Pathology, Clinical features, investigation & treatment of testicular tumors.
- 2. A 7-week-old boy presented with non-bilious vomiting and weigh loss. Vomiting subsequently increase in frequency. Nonbilious but forceful vomiting occurred with each feeding. On palpation a mass was palpable in the epigastric region and blood parameters showed hypochloremic metabolicalkalosis. What is the probable diagnosis and management.

### **II. Short Essay**

- 1) Trachea esophageal fistula
- 2) Ischiorectal abscess
- 3) Treatment of carcinoma penis
- 4) Post-operative complications of splenectomy
- 5) Electrolyte changes in pyloric obstruction
- 6) Splenunculi

### III. Short Answers

- 1) Serum Alpha-fetoprotein
- 2) HIDA Scan
- 3) Abdominal drains
- 4) Ladd's Band
- 5) Meconium ileus
- 6) Pheochromocytoma
- 7) Hiatus hernia
- 8) Pseudo obstruction
- 9) Ulcerative colitis
- 10) Hemobilia

### 3 X 10 = 30 Marks

10 X 2 = 20 Marks

6 X 5 = 30 Marks

**Duration: 3** 

### I. MCQ's

### 1 x 20 = 20 Marks

(Note: Each correct answer carry one mark, each wrong answer carry zero mark)

- 1) Surgeon excises a portion of Liver to the left of the attachment of the falciform ligament. Thesegments that have been resected are
  - a) Segment la and 4
  - b) Segment 1 and 4 b
  - c) Segment 2 and 3
  - d) Segment 1 and 3

Ans: c) Segment 2 and 3 (Sabiston 19/e p 1413, Sabiston 19/ep1094 Bailey 26/e p 106 S)

- 2) Not a complication of gall stones
- a) Mucocele
- b) Acute cholangities
- c) Diverticulosis
- d) Empyema of the gall bladder

Ans: c) Diverticulosis (Sabiston 19/1486 – 1489, Bailey 26/1107)

- 3) Grey's turner sign seen in
- a) Acute pyelonephritis
- b) Acute pancreatitis
- c) Acute cholecystitis
- d) Acute peritonitis

Ans: b) Acute pancreatitis (ref; Schwartz 19/e P 1519-1526, bailey 26/e p111127-1129)

- 4) The commonest cause of acute pancreatitis is
- a) Biliary calculi
- b) Infection
- c) Alcohol abuse
- d) Idiopathi

Ans: a) Biliary calculi (sabiston 19/e, p 1521, Bailey 26/c p1127)

- 5) Corkscrew esophagus is seen in which of the following conditions
- a) Carcinoma esophagus
- b) Scleroderma
- c) Achalasia cardia
- d) Diffuse esophageal spam.

Ans: d) Diffuse esophageal spam (Sabiston 19/e, p1028 – 1032, Bailey26/e Sabiston 9/e, p851-85) plot)

- 6) In a Highly selective vagotomy, the vagal supply is spared to
- a) Proximal  $2/3^{rd}$  of stomach
- b) Antrum
- c) Pylorus
- d) Whole of stomach

Ans; a) Proximal 2/3<sup>rd</sup> of stomach (Sabiston 19/e. p1197-1198, Bailey 26/e p1037 – 1038)

- 7) Troisier's sign is
- a) Right supraclavicular lymph node enlargement
- b) Left supraclavicular lymph node enlargement
- c) Carpopedal spasm
- d) Migrating thrombophlebitis

Ans: b) Left supraclavicular lymph node enlargement (Sabiston 19/e. p1204-1218 Bailey 26/e p1045-1053)

- 8) Double Bubble sign seen in
- a) Pyloric stenosis
- b) Duodenal atresia
- c) Ileal atresia
- d) Esophageal atresia

Ans: b) Duodenal atresia (Sabiston 19/e p1841-1842, Bailey 26/e p120, Sabiston 9/e p1427-1428

- 9) A neonate presents with colicky pain and vomiting with sousage shaped lump in the abdomen, diagnosis is:
- a) Enterocolitis
- b) Perforation of intestine
- c) Intussusception
- d) Acute appendicitis

Ans: c) Intussusception (Sabiston 19/e p1851, Bailey 26/e p 1184, 1187, 1193)

- 10) Coffee bean sign is seen in
- a) Volvulus
- b) Pyloric obstruction
- c) Intussusception
- d) Intestinal obstruction

Ans: a) Volvulus (sabiston 19/e P 1314-1315, Bailey 26/e p1180, 1190, 1895)

- 11) Investigation of choice in Hirschsprung's disease is
  - a) Rectal manometry
  - b) Rectal biopsy
  - c) Rectal examination
  - d) Barium enema

Ans: b) Rectal biopsy (sabiston 19/e p 1848-1849, Bailey 26/e p1177 General Surgery

- 12) Most common cause of lower GI bleed in India is
- a) Benign tumor
- b) Cancer recto sigmoid
- c) Nonspecific ulcer
- d) Hemorrhoids

Ans: d) Hemorrhoids (API medicine 6/e p 509, 511)

- 13) Alvarado sign is for
- a) Diverticulitis
- b) Mesenteric lymphadenitis
- c) Acute Appendicitis
- d) Pelvic abscess

Ans: C) Acute appendicitis (sabiston 19/e, p1277-1782, Bailey 26/e P1201-1210)

- 14) Ideal investigation for fistula in ano is
- a) Endoanal USG
- b) MRI
- c) Fistulography
- d) CT Scan

Ans: b) MRI (sabiston 19/e, p1394-1396, Bailay 26/e p1259-1263)

- 15) Most common complication of splenectomy
- a) OPSI
- b) Avascular necrosis of greater curvature of stomach
- c) Pancreatitis
- d) Atelectasis

Ans: d) Atelectasis (sabiston 19/e p 1558-1559, Bailey 26/e p1096)

- 16) Staghorn calcules is made of
- a) Oxalate
- b) Phosphate
- c) Uric acid
- d) Cystine

Ans:b) Phosphate (Bailay 26/e p1292-1295, campbell 10/e p 1287-1293)

- 17) Most common tumor of urinary bladder is
- a) Squamous cell Carcinoma
- b) Adeno carcinoma
- c) Transitional cell carcinoma
- d) Stratified Squamous carcinoma

Ans: c) Transitional cell carcinoma (Bailay 26/e p1310-1335, Campbell 10/e p 2317)

**General Surgery** 

- 18) Most Common site of development of carcinoma of prostate is
- a) Peripheral zone
- b) Central zone
- c) Transitional zone
- d) Fibromuscular stroma

Ans: a) Peripheral zone (Bailey 26/e p1351-1356, Campbell 10/e p 2715-2740)

- 19) Circumcision is contraindicated in
- a) Paraphimosis
- b) Meatal Stenosis
- c) Hypospadias
- d) Phimosis

Ans: c) Hypospadias (Bailey 26/e p1351-1360, Campbell 10/e p 3505-3530)

- 20) Fournier's gangrene is seen in
- a) Scrotum
- b) Shaft of penis
- c) Base of penis
- d) Glans penis

Ans: a) Scrotum (Bailey 26/e p1388, Campbell 10/e p 324-325)

- 21) Patent Vitello intestinal duct should preferably be operated at
- a) Birth
- b) 6 months of Age
- c) 12 months of Age
- d) 3 years of Age

Ans: 6months of Age

22) Virus that has an increased association with warts

- a) HPV
- b) HIV
- c) LMV
- d) EBV

Ans: a) HPV (sabiston 19/e p1402)

- 23) Diagnosis of colonic polyps in best done radiologyically by
- a) Barium Meal series
- b) Double contrast barium enema
- c) Instant anema
- d) Water soluble contrast enema

Ans: b) Double contrast barium enema (Bailey 26/e, p1160)

- 24) Criminal nerve of Grassi
- a) Anterior branch of vagus at pylorus
- b) Anterior branch of vagus at cardia
- c) Proximal branch of posterior vagus
- d) Distal branch of posterior vagus

Ans: c) Proximal branch of posterior vagus (Bailey 26/e, p1023-1025)

- 25) Carolis disease is
- a) Type I choledochal cyst
- b) TypeII III choledochal cyst
- c) Type IV choledochal cyst
- d) Type V choledochal cyst

Ans: d) Type V choledochal cyst (Bailey 26/e, p1106)

### MODEL QUESTION PAPER PAPER- II THEORY PAPER II, Section B:

### **Pattern of Examination:**

MCQ (multiple choice questions)	<b>10 X 1</b> (10 questions of 1 mark each)	10
LEQ (long essay questions)	<b>1 X 10</b> (1 question of 10 marks)	10
SEQ (short essay questions)	<b>3 X 5</b> (3 questions of 5 marks each)	15
SAQ (short answer questions)	<b>5 X 3</b> (5 questions of 3 marks each)	15
		TOTAL: 50 marks

### **Distribution of Questions according to Subjects:**

Orthopedic	MCQ (multiple choice	<b>4 X 1</b> (4 questions of 1 mark each)	4
Surgery	questions)		
	LEQ (long essay	<b>1 X 10</b> (1 question of 10 marks)	10
	questions)		
	SEQ (short essay	<b>2 X 5</b> (2 questions of 5 marks each)	10
	questions)		
		TOTAI	L: 24 marks

Anesthesiology	MCQ (multiple choice questions)	<b>2</b> X 1 (2 questions of 1 mark each)	2
	SEQ (short essay questions)	<b>1 X 5</b> (1 question of 5 marks)	5
	SAQ (short answer questions)	<b>2 X 3</b> (2 questions of 3 marks each)	6
		TOTAI	L: 13 marks

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	<b>2 X 3</b> (2 questions of 3 marks each)	6
questions)	ΤΟΤΑ	L: 8 marks

Dentistry	MCQ (multiple choice	<b>2 X 1</b> (2 questions of 1 mark each)	2
	questions)		
	SAQ (short answer	<b>1 X 3</b> (1 questions of 3 marks each)	3
	questions)		
		ΤΟΤΑ	L: 5 marks

# **PRACTICALS:**

### TOTAL MARKS: 50

SHORT PRESENTATION	CASE	2 X 20	
Orthopedic Surgery		(2 short cases of 20 marks each)	TOTAL: 40 marks

VIVA VOICE	Marks:
Orthopedic Surgery	5
Radio Diagnosis	3
Anesthesia	2
	TOTAL: 10 marks

**Note:** HOD's of Surgery Allied subjects shall handover Question Banks (Comprising MCQ's, LEQ's, SEQ's and SAQ's) with model answers, with appropriate references in, 1:10 proportion to the CoE through the HoD of Surgery.



### BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA ORTHOPEDICS CURRICULUM

### **Objectives:**

### A. Knowledge

The student should be able to:

- 1. Explain the principles of management of bone injuries and dislocations and associated soft tissue injuries.
- 2. Apply suitable methods to detect and manage common infections of bones and joints;
- 3. Identify congenital, skeletal anomalies and their referral for appropriate correction or rehabilitation.
- 4. Recognize metabolic bone diseases.
- 5. Explain etiology, pathogenesis, manifestations, and diagnosis of tumours affecting bones.
- 6. Recognise and know basics of management of shock in polytrauma patients.
- 7. Identify common rheumatological and degenerative disorders of bone and joint
- 8. Identify peripheral nerve lesions and management

### **B.** Skills

At the end of the course, the student shall be able to:

- 1. Detect common fractures and sprains and management of uncomplicated fractures of upper and lower limb
- 2. Demonstrate techniques of splinting, plaster, immobilization on simulated patients and mannequins
- 3. Resuscitation of polytrauma patients, triage and referral
- 4. Advise aspects of rehabilitation for polio, cerebral palsy and amputations.

### C. Attitude/professionalism

Be able to perform basic orthopedic procedures in simulated environment, provide sound advice of skeletal and related conditions at primary or secondary health care level.

### **D.** Communication

- 1. Casualty management of polytrauma, counselling and referral
- 2. Develop counselling skills.

### Orthopedics

Sl. No.	Торіс	Collaborating Departments	Integration
1	Skeletal Trauma & Polytrauma Competency OR 1.1-1.6	General Surgery & Anaesthesia	Horizontal 1 Hour
2	Anatomical Basis of Fractures Competency OR 2.1-2.16	Human Anatomy	Vertical Total 2 Hrs
3	Musculoskeletal infections Competency 3.1 Competency 3.3	Pathology, Microbiology General Surgery	Vertical Horizontal Total 1 Hour
4	Skeletal Tuberculosis Competency 4.1 Competency 4.2	Pathology General Surgery	Vertical Horizontal Total 1 Hour
5	Inflammatory Disorders & Rheumatoid Arthritis Competency 5.1	Medicine	Horizontal 1 Hour
6	Bone Tumours Competency 10.1	Pathology & Radiology	Horizontal 1 Hour
7	Peripheral Nerve injuries Competency 11.1	General Surgery General Medicine Anatomy	Horizontal Vertical Total 1 Hour
8	Congenital Lesions: HIP Dislocation Torticollis Scoliosis of Spine		
	Competency 12.1	Human Anatomy & Pediatrics	Vertical 1 Hour
9	Procedural Skill Learning in Simulated Environment	Anaesthesia, General Surgery & General Medicine	Horizontal 1 Hour

### INTEGRATED TEACHING (TOTAL 10 HOURS)

### TIME TABLE PHASE WISE

# Third Professional Part 1 ( $6^{th} \& 7^{th}$ term) total teaching hours = 40

Theory teaching hours	15
Tutorials/Seminars/integrated teaching hours	20 10 hrs for tutorials
	5 hrs for Seminar &
	5 hrs for integrated teaching
Self-directed learning	5

### Third Professional year part 2 ( $8^{th} \& 9^{th}$ term) total teaching hours = 50

Theory teaching hours	20	
Tutorials/Seminars/Integrated teaching hours	25	14 hrs for tutorials 6 hrs for seminar and
		5 hrs for integrated teaching
Self-directed learning	5	

Clinical postings: total of 8 weeks

Phase 2  $(3^{rd} 4^{th} \text{ and } 5^{th} \text{ term}) = 2$  weeks

Phase 3 part 1 ( $6^{th}$  and  $7^{th}$  term) = 4 weeks

Phase 3 part 2 ( $8^{th}$  and  $9^{th}$  term) = 2 weeks

### **Course Contents:**

### TRAUMATOLOGY:

### Injuries of Bone and joints:

Fracture general types healing of fractures principles and management Diagnosis and methods of reductions Immobilization Complications of fractures and management of open fractures Pathological fractures. Dislocations and subluxations - mechanism, clinical features and management.

### I. Injuries of upper extremity:

Injuries of shoulder, arm & forearm.
Fracture clavicle, injuries of acromio clavicular joints.
Fracture scapula, upper end of humerus.
Dislocation of shoulder—acute and recurrent.
Fracture shaft humerus.
Fractures around the elbow, radius, ulna.
Fracture scaphoid bone.
Injuries of the hand: Fractures of metacarpals and phalanges.
Bennett's fracture dislocation, Tendon injuries.
POP slab application.

**Must know**: **Clavicle fracture**, Colles fracture, supracondylar fracture of humerus, anterior shoulder dislocation, posterior elbow dislocation, monteggia fracture, gallezzi fracture, nerve injuries-radial nerve, median nerve, ulnar nerve, brachial plexus, vascular injuries- brachial artery, **radial artery**.

**Desirable to know**: scapular fracture, proximal humerus fracture, humerus shaft fracture, fracture both bones forearm and scaphoid fracture.

### **II.** Injuries of Lower Extremity:

Dislocation of hip, Fracture neck of femur, trochanteric fracture, Fracture shaft femur. Injuries - of knee-Fracture tibia, fracture dislocation of ankle, fracture calcaneum. Traction and splints Below knee slab and above knee slab.

**Must know:** Dislocations of hip joint, fracture neck of femur, intertrochantric fracture of femur, patellar fractures, ankle fractures, nerve injuries- sciatic nerve, common peroneal nerve, vascular injuries- popliteal artery.

**Desirable to know:** Pelvic fractures, femur shaft and distal femur fractures, tibial plateau fractures, ligamentous injuries of knee joint.

### III. Injuries of the Spine:

Incidence-mechanism, types, clinical features of cord injury, traumatic Paraplegia, quadriplegia

# Must Know: Whiplash injuries, traumatic paraplegia, first aid treatment of spine injuries.

Desirable to know: Fractures and fracture dislocation of spine.

#### **IV.** Vascular Injuries:

Types, sub fascial compression, Brachial artery injury, Popliteal artery injury, Tibial artery injury.

**V. Amputations**: General indications, levels, technique of above knee amputation, below knee stump, Syme's amputation, upper limb amputation, prosthesis.

Upper limb **Must know**: Above elbow and below elbow amputations. Lower limb **Must know:** Above knee and below knee amputations. **Desirable to know**: Syme's amputation.

Prosthesis:

Must Know: SACH foot, Jaipur foot, Madras foot Desirable to Know: Patellar tendon bearing prosthesis

#### **Cold orthopaedics:**

I. **Deformities:** General, congenital, acquired, principles of management, splints, Club foot, Developmental dysplasia of hip, Congenital skeletal limb deficiencies,

**Must Know:** Congenital Talipes Equin Varus deformity (club foot), Developmental dysplasia of hip joint (DDH) **Desirable to Know**: Congenital Limb deficiencies.

### II. Regional Conditions

Neck: Torticollis, Inter vertebral disc prolapse, Cervical rib
Shoulder, elbow arthritis, painful arc syndrome, Tennis elbow,
Cubitus Varus –Valgus deformities.
Wrist and Hand: wrist drop, claw hand, ganglion, Dupytrens contracture, de
Quervain's disease, trigger thumb, Carpal tunnel syndrome
Spine: Backache examination, intervertebral disc prolapse, Spondylolisthesis
Hip: Clinical Examination, Perthe's disease
Knee: Genu valgum, varum, recurvatum, recurrent dislocation of Patella
Semi membranous Bursa.
Foot: Plantar Fascitis, Flat foot, Foot drop

**Must Know:** Torticollis, cervical rib, tennis elbow, painful arc syndrome, cubitus varus, ganglion, dupytren's contracture, de quervain's disease, carpal tunnel syndrome, genu valgum, genu varum, foot drop, plantar fascitis, claw hand, *Baker'cyst, Osteoarthritis of knee.* 

**Desirable to Know:** Lumbar disc prolapse, frozen shoulder, wrist drop, trigger finger, back examination, spondylolisthesis, perthes disease, recurrent dislocation of patella, bursae around knee joint, flat foot, *Rheumatoid arthritis*, *Spondyloarthropathies*.

### III. Neuromuscular Disorders

Cerebral Palsy: Clinical features, management Anterior Poliomyelitis: pathology; clinical features management, surgery. Leprosy: pathology, Orthopaedic problems - Claw hand, Foot drop - Wrist drop Rehabilitation. **Must know:** Claw hand, wrist drop, foot drop.

**Desirable to know:** Cerebral palsy, Poliomyelitis, Leprosy

### **IV. INFECTIONS:**

Infections: Pyogenic osteomyelitis, acute, chronic, subacute & Brodie's abscess Mycotic infections, Syphilitic lesions.

Disease of joints: Clinical examination, synovial fluid analysis, septic arthritis

Rheumatic, Rheumatoid diseases, Haemophilic arthritis.

Bone and Joint Tuberculosis:

Aetiopathogenesis, clinical features ,management.

Tuberculosis of spine, Pott's paraplegia,

Tuberculosis of hip knee and other joints.

Must know: Acute and chronic osteomyelitis, Brodie 's abscess, septic arthritis of hip and knee joint, tuberculosis of hip joint, knee joint and spine(Pott 's spine), *Pott' paraplegia*.

Desirable to know: Mycotic infections, syphilitic infections.

### V. Metabolic Disorders:

Metabolic disorders: Rickets, Osteomalacia, Osteoporosis, Scurvy, Gout Must Know: Rickets, osteomalacia, Osteoporosis Desirable to know: Scurvy, gout,

### VI. Tumours:

Benign and malignant bone tumours

Benign: Osteochondroma, Enchondroma

Malignant: Osteosarcoma, Osteoclastoma, Ewing's tumour, Multiple myeloma, secondaries

**Must Know:** Osteochondroma, osteoclastoma, Osteosarcoma, secondary deposits in the bone

Desirable to know: Enchondroma, Ewings sarcoma, Multiple myeloma

### VII. Physical Medicine& Rehabilitation:

Short wave diathermy, interferential therapy, wax bath, ultrasound therapy, lumbar and cervical traction, continous passive motion.

Must Know: Short wave diathermy, wax bath, continous passive motion.

**Desirable to know:** interferential therapy, ultrasound therapy, lumbar and cervical traction,

### VIII. Bio-Medical Waste:

Types, potential risks and their safe management.

### IX. Miscellaneous:

Miscellaneous: Paget disease, various types of bone cysts. **Must Know:** Rheumatoid arthritis, osteoarthritis **Desirable to know:** Paget's disease, bone cyst, haemophilic arthritis

### **Teaching/Learning Methods:**

- 1. Large group: Lectures, Theory classes and student seminar
- 2. Small group: Tutorials, Focused group discussions
- 3. Self- directed learning
- 4. DOAP session,
- 5. Simulation Lab
- 6. AETCOM modules
- 7.

### Assessment methods:

Long Essay, Short Essay, Short Answer, MCQS, OSCE Simulation Assessment And Viva-Voce.

Sl. No.	Торіс	Competency
1	Splints tractions in fracture and associated	OR 13.1
	conditions in orthopaedics	
2	Fractures around the elbow in paediatric population	OR 2.4
3	Management of open fractures with note on	OR 2.16
	complications and prevention of infection	
4	Physeal injuries and Fractures in children : relevant	
	anatomy	
5	Ligamentous injuries of knee joint : relevant	OR 1.3- 1.4
	anatomy, mode of injury	
	KNEE dislocation, diagnosis and management	OR 2.15
6	Pulmonary embolism and fat embolism in fractures	OR 2.11-2.12
7	Malunion and principles of treatment	OR 2.15
8	Nonunion types and principles of treatment	OR 2.15
9	Infection and antibiotic protocol in orthopaedics	OR 2.15
10	Spinal cord injuries	OR 2.8

Tutorials: Third professional year Part 1 (6<sup>th</sup> and 7<sup>th</sup> term) 1 hr each

# Theory Classes: Third professional year Part 1 (6<sup>th</sup> and 7<sup>th</sup> term) 1 hr each

Sl. No.	Торіс	Competency
1	Pre-hospital care and Casuality management of a trauma victim including principles of triage	OR 1.1
2	Aetiopathogenesis, clinical features, investigations, and principles of management of shock	OR 1.2
3	Injury to joint: aetiopathogenesis, clinical features,	OR 1.5
	investigations, and principles of management of dislocation of major joints <b>With main Emphasis on Shoulder</b> .	OR 2.3
4	Non operative treatment of fractures cast and braces part1	OR 13.1
5	Part 2	OR 13.1
6	FRACTURES OF clavicle, proximal humerus, shaft of huemrus	OR 2.1-2.3
7	Supracondylar fractures of elbow with discussion on complications	OR 2.4
8	Monteggia and galeazzi fracture dislocation	OR 2.5
9	Fractures of distal end of radius	OR 2.6
10	Classification of pelvic injuries, emergency and definitive management and management of shock and hemodynamic instability part 1	OR 2.7
11	Part 2	
12	vertebral column injuries and management	OR 2.8
13	Fracture neck of femur in children and young adults	OR 2.10
14	Fracture neck of femur in elderly	
15	Intertrochanteric fractures and proximal femur fractures	OR 2.10

# Self-directed learning topics: Third professional year part 1 (6<sup>th</sup> and 7<sup>th</sup> term) 1 hr each

Sl. No.	Торіс	Competency
1	Definition and Classification of Fractures	
2	Aetiopathogenesis, clinical features, investigations, and principles of management of soft tissue injuries	OR 1.3-1.4
3	Recent advances in treatment of fractures	
4	Acetabular fractures	OR 2.9
5	Amputations upper limb and lower limb	

### **Student Seminar**

SI.	Торіс
No.	
1	Fractures, Stages of Healing, Factors Affecting The Healing
2	Complications of fractures
3	Compartment syndrome competency OR 2.11
4	Reflex sympathetic osteodystrophy and myositis ossificans
5	Named fractures of upper limb and lower limb

# Theory Classes: Third professional year part 2 (8<sup>th</sup> and 9<sup>th</sup> term)

### Theory class 1 hr each

Sl. No.	Торіс	Competency
1	Fractures shaft of femur in young adults and elderly	OR 2.12
2	Fractures distal femur	OR 2.13
3	Fractures of tibia and fibula	OR 2.13
4	Fractures of ankle	OR 2.14
5	Fractures talus and calcaneum	OR 2.13
6	Fractures of small foot bones	OR 2.13
7	Dislocations of hip	OR 1.5
	Bone and joint infections	OR 3.1-3.3
8	Part 1: Types , classification and general principles	
9	Part 2: specific joints and principles in paediatric	
10	Part 3: surgical management and complications	
11	Skeletal tuberculosis general principles	OR 4.1
12	Tuberculosis of spine Caries	OR 4.1
13	Tuberculosis of hip and knee	OR 4.1
14	Aetiopathogenesis, clinical features, investigation and principles of	OR 7.1
	management of metabolic bone disorders in particular osteoporosis,	
15	Osteomalacia, and rickets.	OR 7.1
16	Peripheral nerve injuries general principles and upper limb injuries	OR 11.1
17	Peripheral nerve injuries lower limb injuries	OR 11.1

18	Scoliosis	OR 12.1
19	Congenital dislocation of hip	OR 12.1

# Tutorial Classes: Third professional year part 2 (8<sup>th</sup> and 9<sup>th</sup> term) 1 hr each

Sl. No.	Торіс	Competency
1	Rheumatoid arthritis and associated inflammatory disorders part 1	OR 5.1
2	Part 2 osteoarthritis primary and secondary	OR 5.1
3	Clinical features, investigations and principles of management of	OR6.1
	degenerative condition of spine Cervical Spondylosis,	
4	Clinical features, investigations and principles of management	OR6.1
	Lumbar Spondylosis and prolapsed intervertebral disc	
5	Soft tissue conditions duuyntrens contracture, tennis elbow,	
	golfers elbow, trigger finger, dequervians tenosynovitis, carpal	
	tunnel syndrome	
6	Cerebral palsy	OR 9.1
7	Bone tumours general principles	OR 10.1
8	Benign bone tumours	OR 10.1
9	Malignant bone tumours	OR 10.1
10	Bone cysts and tumour like conditions	
11	CTEV	OR 12.1
12	Medicolegal aspects in orthopaedics	
13	Radiation hazards and prevention	
14	Biomedical waste management	

# Self-directed learning topics: third professional year part 1 (8<sup>th</sup> and 9<sup>th</sup> term) 1 hr each

Sl. No.	Торіс
1	Causes of backache, sciatica
2	coxa vara, SCFE and perthes disease
3	Spina bifida and peripheral neuropathies
4	Arthroscopy in orthopaedics
5	Joint replacement in orthopaedics upper limb and lower limb
6	Poliomyelitis and post-polio residual paralysis OR8.1

### **Student Seminar:**

Sl. No.	Торіс
1	Torticollis and cervical rib
2	Pagets disease, fluorosis and hyperparathyroidism
3	Mortons neuroma metatrsalgia and stress fracture
4	Bursitis knee and elbow
5	Frozen shoulder ,painful arc syndrome and meralgia paresthetica

### University Theory & Clinical Examination will be part of General Surgery

Books recommended:

- 1. Natarajan M., Textbook of Orthopaedics Vol. I & II
- 2. Maheshwari, Textbook of Orthopaedics.
- 3. Crawford Adams, Outline of Orthopaedics. Fractures and dislocation, 9th edition, ELBS, 1987.
- 4. Crawford Adams, Outline of Orthopaedics, 11<sup>th</sup> ed, ELBS; 1990.
- Baily & Love, A Short Practice of Surgery, 25<sup>th</sup> ed., (International Students Edition); 2007.
- 6. Graham Apley, System of Orthopaedics.
- 7. Das S, Clinical Methods in Surgery, 6<sup>th</sup> ed, S Das .13 Old Mayors, Calcutta; 1996.
- 8. John ebenezer 4th edition text book of orthopaedics



### BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA RADIOLOGY: DIAGNOSIS & IMAGING CURRICULUM

### Goals:

Realization of the basic need of various radio-diagnostic tools.

Radio-diagnostic Techniques to be adopted in different clinical situations in diagnosis of ailments.

### **Objectives:**

### A. Knowledge

- 1. The student shall be able to understand basics of X-ray / USG production, its utility and hazards.
- 2. Appreciate and diagnose radiological changes in diseases of Chest, Abdomen, Skeletal system, Gastro-intestinal system, Genito-urinary System & CNS.
- Learn about various Imaging techniques like nuclear medicine, computerized tomography (CT), Ultrasound, magnetic resonance imaging (MRI), conventional & Digital subtraction Angiography (DSA).

### **B.** Skills

At the end of the course the student shall be able to

- 1. Interpret various radiological findings and their consequences
- 2. Use basic protective techniques during various Imaging procedures
- 3. Advice appropriate Diagnostic procedures to arrive at an appropriate diagnosis.

### **Course Content:**

### I. Bones & Joints:

- 1. Congenital dislocation of hip, congenital syphilis, Achonodroplasis, Osteogenesis Imperfect.
- 2. Infection: Osteomyelitis, Tuberculosis of Bone & Spine.
- 3. Lesions of Joints: Septic / Tuberculous Arthritis, Rheumatoid, Arthritis, Ankylosing Spondylitis, Osteo-Arthritis, Gout. Bone

- 4. Tumours: Ewing's, Osteogenic Sarcoma, Giant Cell Tumour Neurofibroma. Lymphoreticular system & Haemopoietic
- 5. Disorders: Thalassaemia, Sickle Cell disease, Lymphomas, Multiple myeloma, plasmacytoma, Haemophilia.
- 6. Metabolic & Endocrine Disorders of Bone: Rickets & Osteomalacia, Scurvy, Osteoporosis, Acromegaly, and Hyperparathyroidism.
- 7. Skeletal trauma: General Principles.

### II. Chest:

 Methods of examination, Normal X-ray Chest, Bronchopulmonary Segments. Interpretation of Abnormal Chest X-ray: Silhouette sign, Air Bronchogram, Interstitial Shadows, Alveolar Shadows, Honeycomb Lung, Cavitations, Calcification, Hilar Shadow, Mediastinum, Pleura. Bronchography. Bronchogenic Carcinoma. Miliary Shadows, Pulmonary Tuberculosis, Solitary Pulmonary Nodule, Bronchiectasis, Primary complex.

### III. Cardio-vascular system:

 Normal Heart: Methods of examination. Cardiomegaly, Pericardial Effusion. Acquired Heart Diseases: Valvular Heart Disease, Ischaemic Heart Disease. Congenital Heart Disease. Aortic Aneurysms, Co-arctation of Aorta.

### IV. Gastro-intestinal tract & abdomen:

- 1. Barium Examination of GI Tract. Acute Abdomen.
- 2. Oesophagus: Carcinoma, Strictures, Varices, Achalasia, and Hiatus Hernia.
- Stomach & Duodenum: Ulcer disease, Malignancy. Intestine: Intestinal Obstruction, Volvulus, Ulcerative Colitis, Intussusceptions, Malignancy, Hirschsprung's Disease, Koch's Abdomen Diverticular Disease, Polyp's.

### V. Hepato-bilary System, Pancreas:

- 1. Liver: Abscess, Hepatoma, Cirrhosis, Portal Hypertension, and Spenoportography.
- 2. Gall-Bladder: Calculus Disease, Malignancy, PTC, ERCP.
- 3. Pancreas: Pancreatitis, Malignancy.

### VI. Uroradiology:

 Method of Examination : Intravenous Urography (IVU) Calculus Disease, PUJ Obstruction, PU Valves, Renal Artery Stenosis, Wilm's Tumour, Renal Cell Carcinoma, GU Koch's.

### VII. Obstetrics & Gynaecology:

1. Hysterosalpingography (HSG), Intra-Uterine Foetal Death, Fibroid, Ovarian Tumours, Ultrasongraphy & Transvaginal USG.

### VIII. Central Nervous System:

1. Raised Intracranial Tension, Intracranial Calcification, Head Injury, Cerebrovascular Accident, Rind Enhancing Lesions in Brain, Spinal Neoplasms, Myelograpy.

### IX. Miscellaneous:

- 1. Radiation Hazards, Radiation Protection.
- 2. Imaging Modalities: USG, CT, MRI: Principles, Applications, Advantages, And Limitations.
- Angiography: Conventional Angiogram, DSA, Carotid, Coronary, Renal Angiograms, Aortogram.
- 4. Contrast Media: Barium Sulphate, Water Soluble & Oily Contrast.
- 5. Interventional Radiology: Developments, Angioplasty, Embolization.
- 6. Mammography: Principles & Applications.

### **Teaching -Learning Methods:**

Lectures, Tutorials and lecture cum demonstrations

Distribution of Teaching hours -

Lectures - 20 hours

Bedside clinics (Radiology OPD) - 36 hours,

One clinical postings: - 2 weeks in Radiology

### Assessment:

Formative Assessment done at the end of clinical posting- OSCE/Charts.

Internal assessment: Will be added to General Surgery

50 marks out of Total 450 marks under general surgery.



### BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA ANAESTHESIOLOGY CURRICULUM

#### Goals:

The undergraduate students should realize the importance of safe forms of anaesthesia for different kinds of surgeries. The students should know the preoperative evaluation and optimization of patients posted for surgery. They should understand the monitoring in the post-anaesthesia care unit. They should also know the importance of maintenance of patency of the airway in an unconscious patient-anaesthetised or otherwise.

### **Objectives:**

The undergraduate shall be able to:

- 1. Enumerate different local anaesthetic agents, general anaesthetic agents, muscle relaxants, sedatives and analgesics.
- 2. They shall be able to enumerate the drugs used to treat shock and those used for resuscitation.
- 3. They shall also understand the indications, mode of administration, contraindications, and side effects of the agents mentioned above.
- 4. They shall be trained in CPBR/COLS on manikins.

### Course content with competency numbers both for Theory and Practicals:

#### Annexure – 1

### Must know, Nice to know, Desirable to know topics:

Must know: BLS in simulated Environment, ALS in Simulated Environment.

Nice to Know: Preoperative assessment, Anatomy of Airway & its Anaesthetic implications.

**Desirable to Know:** Acute and Chronic pain and their management, Palliative care & Pain management in terminally ill.

### **Teaching-Learning methods (Theory & Postings)**

Sl. No.	Competency	Domain K/S/A/C	Level (K/KH/ S/SH)	Departments (S)	A/I (Y/N) (H/V)	Teaching learning method	Торіс
AS 1.1	Describe the evolution of Anesthesiology as modern specialty	K	K	Anaesthesiology	Nil		
AS 1.2	Describe roles of Anesthesiologist in the medical profession (including as peri- operative physician, in ICU and high dependency units, in the management of Acute and Chronic pain, including labour analgesia, resuscitation of acutely ill)	K	K	Anaesthesiology	Nil	Lecture and Discuss	1. Introduction to Anaesthesiology
AS 1.3	Enumerate and describe the principle of ethics as it relates to Anesthesiology	K	K	Anaesthesiology	Nil		
AS 1.4	Describe the prospects of Anesthesiology as career	K	K	Anaesthesiology	Nil		

## **Deriving Objectives from Competencies**

Sl. No.	Competency	Domain K/S/A/C	Level (K/KH /S/SH)	Departments (S)	A/1 (Y/N) (H/V)	Teaching learning method	Торіс
AS 2.1	Enumerate the indications, describe the steps and demonstrate in a simulated environment basic life support in adults, children and neonates.	K/S	SH	Medicine, Paediatrics	A Horizontal	Lecture &	2. BLS in Simulated Environment
AS 2.2	Enumerate the indications, describe the steps and demonstrate in a simulated environment advanced life support in adults, children.	K/S	SH	Medicine, Paediatrics	Horizontal	DOAP	3. ALS in Simulated Environment

SI. No.	Competency	Domain K/S/A/C	Level (K/KH /S/SH)	Departments (S)	A/1 (Y/N) (H/V)	Teaching learning method	Торіс
AS 3.1	Describe the principles of preoperative evaluation	K	KH	General Surgery & General Medicine	Horizontal	Lecture	
AS 3.2	Elicit ,present and document an appropriate history	K,S, A, C	SH	General Surgery & General Medicine	Horizontal		
	including medication history in a patient undergoing surgery as	K,S, A, C	КН	General Surgery & General Medicine	Horizontal		
	it pertains to a preoperative anaesthetic evaluation	K,S, A, C	SH	General Surgery & General Medicine	Horizontal		
AS3.3	Demonstrate and document an appropriate clinical	SH KH		General Surgery & General Medicine	Horizontal		
	examination, in a patient undergoing general surgery.	КП		General Surgery & General Medicine	Horizontal		4.Pre-Operative assessment
A\$3.4	Choose and interpret appropriate testing for patients undergoing surgery.	КН		General Surgery & General Medicine	Horizontal		
AS3.5	Determine the readiness for General Surgery in a patient based on the preoperative evaluation	S	SH	Surgery General Medicine	A Horizontal	Lecture, Small group discussion, DOAP session	
AS3.6	Choose and write a prescription for appropriate pre medications for patients undergoing surgery	S	SH	Orthopaedics, Surgery, OBG	A Horizontal	Lecture, Small group discussion, DOAP session	

SI. No.	Competency	Domain K/S/A/C	Level (K/KH /S/SH)	Departments (S)	A/I (Y/N) (H/V)	Teaching learning method	Торіс
AS4.1	Describe and discuss the pharmacology of drugs used in induction and maintenance of general anaesthesia (including intravenous and inhalation induction agents, opiate and non-opiate analgesics, depolarising and non-depolarising muscle relaxants, anticholinesterases)	K	КН	Pharmacology	A Vertical	Lecture, Small group discussion, DOAP session	5.Premedicati on & Induction of Anaesthesia
AS4.2	Describe the anatomy of the airway and its implications for general Anaesthesia	K	КН	anatomy	A Vertical	Lecture, Small group discussion, DOAP session	6. Anatomy of Airway & its Anaesthetic implications
AS4.3	Observe and describe the principles and the practical aspects of induction and maintenance of anesthesia	S	КН	Pharmacology	A Vertical	Lecture, Small group discussion, DOAP session	
AS4.4	Observe and describe the principles and the steps/ techniques in maintenance of vital organ functions in patients undergoing surgical procedures	K	КН	Orthopaedics, Surgery, OBG, ENT	A Horizontal	Lecture, Small group discussion, DOAP session	7.Maintenance and monitoring of general anaesthesia
AS4.5	Observe and describe the principles and the steps/ techniques in monitoring patients during anaesthesia	K	КН	Orthopaedics, Surgery, OBG, ENT	A Horizontal	Lecture, Small group discussion, DOAP session	
AS4.6	Observe and describe the principles and the steps/ techniques involved in day care anesthesia	K	КН	Orthopaedics, Surgery, OBG, ENT	A Horizontal	Lecture, Small group discussion, DOAP session	8.Day –Care Anaesthesia of
AS4.7	Observe and describe the principles and the steps/ techniques involved in anesthesia outside the operating room	K	КН	Orthopaedics, Surgery, OBG, ENT	A Horizontal	Lecture, Small group discussion, DOAP session	Anaesthesia- Care outside OT

BLDE (Deemed to be University)

Sl. No.	Competency	Domain K/S/A/C	Level (K/KH /S/SH)	Departments (S)	A/1 (Y/N) (H/V)	Teaching learning method	Торіс
AS 5.1	Enumerate the indications for and describe the principles of regional anaesthesia (including spinal, epidural and combined)	K	КН		Horizontal	Lecture, small group discussion, DOAP session	9.Spinal,Epidural and combined Anaesthesia
AS 5.2	Describe the correlative anatomy of the brachial plexus, subarachnoid and epidural spaces	K	КН	Anatomy	Vertical	Lecture, small group discussion, DOAP session	10.Anatomy of Subarachnoid , epidural spaces and blocks
AS 5.3	Observe and describe the principles and steps/ techniques involved in peripheral nerve blocks	S	КН	Anatomy	Vertical	DOAP	11.Anatomy of Nerves of Upper & Lower limbs
AS 5.4	Observe and describe the pharmacology and correct use of commonly used drugs and adjuvants in regional anaesthesia	K/S	КН	Pharmacology	A Vertical	Lecture, small group discussion, DOAP sessions	
AS 5.5	Observe and describe the principles and steps/techniques involved in caudal epidural in adults and children	K/S	КН	Anaesthesia	A Horizontal/ Vertical	Lecture, small group discussion, DOAP sessions	12.Local anaesthetic agents and adjuvants
AS 5.6	Observe and describe the principles and steps/techniques involved in common blocks used in surgery (including brachial plexus)	K/S	КН	Anaesthesia	A Horizontal/ Vertical	Lecture, small group discussion, DOAP sessions	

Sl. No.	Competency	Domain K/S/A/C	Level (K/KH/S /SH)	Departments (S)	A/1 (Y/N) (H/V)	Teaching learning method	Торіс
AS 6.1	Describe the principles of monitoring and resuscitation in recovery room	K/S	КН	Pharmacology/ Medicine	A Horizontal/ Vertical	Lecture, small group discussion, DOAP sessions	
AS6.2	Observe and enumerate the contents of the crash cart and describe the equipment used in the recovery room.	K/S	KH	Anaesthesiology		Lecture, DOAP sessions	13.Post- Anaesthesia Care
AS6.3	Describe the common complications encountered by patients in the recovery room, their recognition and principles of management	K	KH	General surgery	A horizontal	Lecture	

Sl. No.	Competency	Domain K/S/A/C	Level (K/KH/S /SH)	Departments (S)	A/1 (Y/N) (H/V)	Teaching learning method	Торіс
AS7.1	Visit, enumerate and describe the functions of an intensive care unit	S	КН	Anaesthesiology		Lecture, DOAP	14 Interview
AS7.2	Enumerate and describe the criteria for admission and discharge of a patient to an ICU	К	KH	General medicine	A horizontal	Lecture, DOAP	- 14.Intensive Care
AS7.3	Observe and describe the management of unconscious patient	K	KH	General medicine Physiology	H V	Lecture, small group discussion	15 Interview
AS7.4	Observe and describe the basic setup process of ventilator	K	КН	Physiology General medicine	Vertical Horizontal	Lecture,	15.Intensive care of a Patient on Ventilator
AS7.5	Observe and describe the principles of monitoring in an ICU	K	КН	General medicine	Н	Lecture, DOAP	

Sl. No.	Competency	Domain K/S/A/C	Level (K/KH /S/SH)	Departments (S)	A/1 (Y/N) (H/V)	Teaching learning method	Торіс
AS8.1	Describe the anatomical correlates and physiological principles of pain	K	K	Human anatomy and physiology	Horizontal	Lecture,	16 A suctor
AS8.2	Elicit and determine the level, quality and quantity of pain and its tolerance in patient or surrogate	S	КН	physiology	H Vertical	Lecture, DOAP sessions	16.Acute and Chronic pain and their
AS8.3	Describe the pharmacology and use of drugs in the management of pain	K	KH	pharmacology	H Vertical	Lecture	management
AS8.4	Describe the principles of pain management in palliative care	K	KH	Pharmacology Gen. medicine	H Verti cal A Horizontal	Lecture	17.Palliative care & Pain
AS8.5	Describe the principles of pain management in the terminally ill.	K	КН	Pharmacology Gen. medicine	H Vertical A Horizontal	Lecture	management in terminally ill

Sl. No.	Competency	Domain K/S/A/C	Level (K/KH /S/SH)	Departments (S)	A/1 (Y/N) (H/V)	Teaching learning method	Торіс
AS 9.1	Establish intravenous access in a simulated environment	K/S	SH	Surgery, Medicine, Pediatrics	A Horizontal	DOAP	18.Establishing peripheral & Central lines (in Simulated environment)
AS 9.2	Establish central venous access in a simulated environment	K/S	SH	Surgery, Medicine, Pediatrics	A Horizontal	DOAP	
AS 9.3	Describe the principles of fluid therapy in the preoperative period	K/S	KH	Medicine, Paediatrics	A Horizontal	Lecture & DOAP	19.Perioperative fluid therapy & blood transfusion
AS 9.4	Enumerate blood products and describe the use of blood products in the preoperative period	K/S	КН	Medicine, Paediatrics	A Horizontal	Lecture & DOAP	

Sl. No.	Competency	Domain K/S/A/C	Level (K/KH /S/SH)	Departments (S)	A/1 (Y/N) (H/V)	Teaching learning method	Торіс
AS10.1	Enumerate the hazards of incorrect patient positioning	K	КН	Orthopaedics, Surgery, OBG	A Horizontal	Lecture, Small group discussion, DOAP session	20.Perioperative errors, hazards and their prevention
AS10.2	Enumerate the hazards encountered in the perioperative period and steps/techniques taken to prevent them	K	КН	Orthopaedics, Surgery, OBG	A Horizontal	Lecture, Small group discussion, DOAP session	
AS10.3	Describe the role of communication in patient safety	K	КН	Medicine	A Horizontal	Lecture, Small group discussion, DOAP session	
AS10.4	Define and describe common medical and medication errors in anaesthesia	K	КН	Pharmacology	A Vertical	Lecture, Small group discussion, DOAP session	

### Note:

### **Domains:**

K-Knowledge S- Skills (Psychomotor) A-Attitude C- Communication

Levels:

K-Know

KH-Know how

S-Show

SH-Show how

### Number of teaching hours: 21 hours

### Remedial measures for slow learners:

Assessment (Formative): MCQs

**Internal Assessment:** NA

**Template of total teaching hours:** 

Annexure -2

IA marks distribution & eligibility: Part of General Surgery and Allied subjects

# University theory examinations & Clinicals: Will be part of Section II of General Surgery paper& clinical examination of Surger

Reference book list with latest editions

- 1. Lee's synopsis of Anaesthesia. By Atkinson, Rushman & David
- 2. Anaesthesia & Co-existing diseases by Robert K. Stoelting, Stephen. F. Dierdorf.
- 3. Clinical Anaesthesiology by G. Edvard. Morgan. Jr.Maged. S. Mikhail. Micharl. J.Murray. C Philip Larson-Jr
- 4. Pharmacology & Physiology in Anaesthetic Practice. by Stoelting R.K.



### BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA OBSTETRICS & GYNECOLOGY CURRICULUM

### Goal:

Graduate capable of delivering effective first contact obstetric and gynaecological care.

### **Objectives:**

### A. Knowledge

At the end of the course, the student shall be able to:

- 1. Should have knowledge about the MCH services.
- 2. Should be competent to diagnose and manage normal delivery, operative obstetrics and gynaecology, medical disorders in pregnancy, common surgical diseases including emergencies.
- 3. Understand, describe and apply the knowledge of fluid and electrolyte therapy.
- 4. Describe indications of blood transfusion, apply it and manage complications.
- 5. Understand and describe principles of asepsis, disinfection and sterilization, take up rational drug therapy and appropriate use of antibiotics in both medical and surgical conditions.
- 6. Develop basic awareness and detect common malignancies in the country, understand principles of management and prevention.
- 7. Enumerate different types of anaesthetic agents, their indications, uses contraindications and side effects.
- 8. Commitment to advancement of quality and patient safety in obstetrics and gynaecological practice.
- 9. Understand the nature of the natural calamities and disasters, be an effective team leader or member and deliver appropriate health care during emergencies.

### **B.** Skills

At the end of the course, the student should be able to:

- 1. Should be a able skilled birth attendant (SBA).
- 2. Examine and diagnose common gynaecological conditions.
- 3. Know operative interventions in obstetrics like ventouse and forceps.
- 4. Acquire knowledge of basic principles of operative surgeries like caesarean section, abdominal and vaginal hysterctomy,tubectomy, cervical biopsy, cauterization, dilatation and curettage, dilation and evacuation including per operative procedures and manage patients in post operative period.
- 5. Plan for various tests and their interpretation.
- 6. Diagnose and manage patients with various types of shock.
- 7. TRIAGING OF PATIENTS Resuscitate and manage air-way, patients with Eclampsia, PPCM, DIC, HELLP syndrome, cardio-respiratory failure, etc.

- 8. Diagnose and initiate treatment of acute surgical emergencies and refer appropriately.
- 9. Provide primary care for a patient in pre labour.

10. Identify congenital anomalies and refer them for appropriate management.

- 11. In addition to the skills referred above in items he/she shall have observed/assisted/ performed the following during internship:
  - i. Conduct of labour
  - ii. Episiotomy suturing
  - iii. Vacuum delivery
  - iv. Forceps delivery
  - v. Assisted Breech delivery
  - vi. Artificial rupture of membrane (ARM)
  - vii. MTP procedures (Medical / Surgical)
  - viii. I.V line insertion
  - ix. Pap smear
  - x. Endometrial biopsy
  - xi. Suction and evacuation
  - xii. Excision of Bartholin cyst
  - xiii. Biopsy for cervical cancer
  - xiv. Catheterization and Nasogastric intubation
  - xv. Dilatation and Evacuation
  - xvi. Tubectomy
  - xvii. Culdocentesis
  - xviii. Diagnostic D&C
  - xix. Caesarean Section
  - xx. Endotracheal intubation
  - xxi. Cervical cauterisation
  - xxii. Fractional curettage
  - xxiii. Cervical encircalage
  - xxiv. Myomectomy
  - xxv. Colposcopy
  - xxvi. Abdominal and Vaginal Hysterectomy
  - xxvii. Basic principles Laparoscopic procedures
- xxviii. Basic principles Hysteroscopic procedures

### **C. Affector Domain**

- 1. Understand and follow ethical approach in management of medical and surgical conditions in relation to obstetrics and gynaecology.
- 2. Counsel and guide the patients regarding need, options, advantages and disadvantage of common obstetrics and gynaecological surgical procedures.
- 3. Develop overall humane approach in management of terminal care for needy patients.
- 4. Co-ordinate and organize needful services at the time of natural disasters.

- 5. Work in tandem with National and State level health care policies.
- 6. Understand and follow medico legal aspects in obstetrics and gynaecological care.
- 7. Develop Ability to administer informed consent and counsel patient prior to delivery, surgical procedures, high risk pregnancy, ultrasonography, medical termination of pregnancy.

# **D. Integration:**

The teaching should be aligned and integrated horizontally and vertically in order to provide a sound biologic basis and a holistic approach to the care of the obstetrics and gynaecological patient.

The undergraduate teaching in OBG shall be integrated to various stages with preclinical, para clinical and other clinical departments.

# **PHASE II**

### THEORY (CONCEPTION AND ANTENATAL CARE)

### **DURATION: 25 Hours**

### A) MUST KNOW

### **OBSTETRICS (13 Hours)** 1<sup>st</sup> HALF

- 1. OG 2.1 Pelvic Anatomy (1 Hr) Nesting With Anatomy
- 2. OG 3.1 Physiology Of Conception (1 Hr) Nesting With Physiology
- 3. OG 4.1: Fetus And Placenta: (2 Hours)

OG 4.1 – Development of Fetus And Teratogenesis (1hr)

OG 4.1 – Development of Placenta And Its Functions (1hr)

4. OG 6.1: Diagnosis Of Pregnancy: (2hours)

OG 6.1 – Signs And Symptoms (1hr)

- OG 6.1 Investigations To Confirm Pregnancy And Differential Diagnosis(1hr)
- 5. OG 7.1: Maternal Changes In Pregnancy: (2hours)

OG 7.1 – Genito-Urinary System Changes (1hr)

OG 7.1 - Cvs/Haematological/Rs & Git Changes (1 Hr)

6. OG 8.1 To 8.10: Antenatal Care (5 Hours)

OG 8.1 – Definition, Objectives And High & Low Risk Pregnancy And Antenatal Care (1hr)

OG 8.2 - History Taking And Examination In Each Trimester Visit (1hr)

OG 8.8 – Investigations In Each Trimester (1 Hr)

OG 8.7 - Immunization In Pregnancy (1hr)

OG 8.10 - Advice In Each Trimester (1hr)

# **OBSTETRICS (12 HOURS) 2<sup>nd</sup> HALF**

### A) MUST KNOW

1. OG 9.1 to 9.4 & 8.9: Complications Of Early Pregnancy (6 Hours)

OG 9.1 - Abortion In First Trimester (1hr)

- OG 9.1 Abortion In Second Trimester (1hr)
- OG 9.5 Hyperemesis Gravidarum (1hr)
- OG 9.3 Ectopic Pregnancy (1hr)
- OG 9.4 Molar Pregnancy (1hr)
- OG 8.9 Fda Drugs Category In Pregnancy (1hr)
- 2. OG 1.1 & 1.2: Vital Statistics (Mmr/Pmr/Br) (1hr)
- 3. OG 15.1: Pre Conceptional-Counselling (1hr)
- 4. OG 8.3: Antenatal Fetal Monitoring (Karyotyping; Amniocentesis; Bpp) (2 Hr)
- 5. OG 15.1 & 15.2 High Risk & Low Risk Pregnancy (1hr)

# INTEGRATED TEACHING (2 Hrs): 2<sup>nd</sup> HALF

OG 4.1 - Fetal Development

ANATOMY & OBG

### **B.** Desirable to know

- 1) Teratogenesis
- 2) Different teratogenic drugs & their effects
- 3) USG features for diagnosis of pregnancy
- 4) Special investigation in pregnancy
- 5) APLA
- C. Nice to know
  - 1) Safe antihypertensives & antiepiletics
  - 2) Thrombocytopenia & its management
  - 3) Safe & Unsafe vaccines in pregnancy
  - 4) Different thrombophilias in RPL
  - 5) Cesarean scar pregnancy
  - 6) Scoring in bacterial vaginosis

# **III/I PHASE**

# THEORY (NORMAL & ABNORMAL LABOUR) OBSTETRICS (13 Hrs) DURATION: 13 HOURS

### A) MUST KNOW

- 1. OG 14.1: Types Of Pelvis (1 Hr)
- 2. OG 10.1 & 10.2 Physiology Of Normal Labour (1hr)
- 3. OG 13.1 To 13.5 Stages Of Labour & Management (2 Hrs)
- 4. OG 14.1 & 14.2: Cpd & Contracted Pelvis (1hr)
- 5. OG 14.2 Obstructed Labour & Rupture Uterus (1hr)
- 6. OG 14.4: Dystocia (1hr)
- 7. OG 14.4: Malpresentation And Malpositions (Breech/Transverse Lie/Face) (2hrs)
- 8. OG 19.1: Normal Puerperium (1hr)
- 9. OG 19.1: Abnormal Puerperium (1hr)
- 10. OG 17.1 17.2: Lactation (1hr)

OG 18.1 To 18.3: New Born Care (1hr)

### B) Desirable to know:

- 1) Dosages of drugs used for PPH
- 2) Details of surgical methods used for PPH
- 3) Galactoguages and lactation suppression
- 4) Management of complications of breast feeding
- 5) Details of surgeries for Mullerian anomalies
- 6) Management of Turners syndrome, kkeinfelters syndrome and Adrenogenital syndrome
- 7) Diseases of breast

# GYNAECOLOGY (ENDOCRINE & INFERTILITY) 2<sup>nd</sup> HALF

### **DURATION:12 HOURS**

### A) MUST KNOW

- 1. OG 23.1: Normal Puberty (1 Hr)
- 2. OG 23.1 To 23.3 Abnormal Puberty (4hrs)
  - Mullerian Anamolies (1hr)
  - Precocious Puberty (1hr)
  - Intersexuality (1hr)
  - OG 25.1: Primary Amenorrhoea (1hr)
- 3. OG 25.1: Secondary Amenorrhoea (1hr)
- 4. OG 30.1 & 30.2 Pcos & Hyderandrogenism (1hr)
- 5. OG 32.1: Menopause (1hr)
- 6. OG 22.1: Physiological & Pathological Wdpv (1hr)
- 7. Genital Infections: (3 Hrs)

OG 27.1 – Sexually Transmitted Diseases (1 Hr)

OG 27.2 & 27.3 – Genital Tuberculosis & Hiv (1 Hr)

OG 27.4 - Pelvic Inflammatory Diseases (1 Hr)

#### C) Nice to know:

- 1) Labour analgesia
- 2) Management of cervical tear
- 3) Management of vault tear
- 4) DVT in puerperium
- 5) Precautious puberty

### SEMINARS / PANEL / SYMPOSIUM (10 TOPICS) DURATION: 20 HOURS

# **OBSTETRICS (5 TOPICS) 1<sup>st</sup> HALF**

- 1. OG 7.1 Physiological Changes In Pregnancy Seminar
- 2. OG 9.4 Molar Pregnancy Seminar
- 3. OG 9.1 Abortion Panel
- 4. OG 9.3 Ectopic Pregnancy Seminar
- 5. OG 14.3 Lower Segment Caesarean Section

### **GYNAECOLOGY (5 TOPICS)**

- 1. (NOT IN CBME OG 23.3) Malformations Of Genital Tract Seminar
- 2. OG 25.1 Amenorrhoea Symposium
- 3. (NOT IN CBME) Benign & Pre-Malignant Leisons Of Vulva And Vagina Panel
- 4. OG 33.2 Benign & Pre-Malignant Leisons Of Cervix Symposium
- 5. OG 34.1 Premalignant Leisons Of Endometrium Seminar

### SMALL GROUP DISCUSSION (10 TOPICS ) DURATION: 20 HOURS

# **OBSTETRICS (5 TOPICS)** 2<sup>nd</sup> HALF

- 1. OG 6.1 Diagnosis Of Pregnancy Tutorial
- 2. OG 8.1 To 8.9 Antenatal Care Tutorial
- 3. OG 19.1 To 19.4 Normal Puerperium Tutorial
- 4. OG 19.1 To 19.4 Abnormal Puerperium Problem Based Learning
- 5. (NOT IN CBME OG 9.1) Recurrent Pregnancy Loss Group Discussion

# GYNAECOLOGY (5 TOPICS)

- 6. OG 23.2 Puberty Tutorial
- 7. OG 23.1 Intersexuality Tutorial
- 8. OG 21.1 To 21.2 Contraception I Group Discussion
- 9. OG 21.1 To 21.2 Contraception Ii Group Discussion
- 10. OG 19.1 To 19.3 Sterlization Procedures Tutorial

# **INTEGRATED TEACHING (3 TOPICS)** 1<sup>st</sup> HALF **DURATION:6** Hrs

- OG 8.9- Rational Use Of Drugs & Prescription In Pregnancy Pharmacology & OBG
- 2. OG 21.1 & 21.2 Rch Programmes Community Medicine & OBG
- 3. OG 20.1 To 20.3 Mtp & Pcpndt

Forensic Medicine & OBG

# SELF DIRECTED LEARNING (5 TPOICS) 1<sup>st</sup> HALF

# **DURATION: 5 HOURS**

- 1. OG 16.1 & 16.2 Third Stage Complications
- 2. OG 19.1 To 19.4 Abnormal Puerperium
- 3. OG 14.1 Cephalo Pelvic Disproportion (CPD)
- 4. OG 27.4 Pelvic Inflammatory Diseases (PID)
- 5. OG 22.1 & 22.2 White Discharge Per Vaginum (WDPV)

# PHASE III/II

### THEORY

### **DURATION:25 HOURS**

### **OBSTETRICS (HIGH RISK PREGNANCY)**

### A) MUST KNOW

# 1<sup>st</sup> HALF

- 1. OG 12.2 Anaemia (1hr)
- 2. OG 21.1 -Hypertension In Pregnancy (2hrs)
- 3. OG 12.3 Gestational Diabetes (1hr)
- 4. OG 12.4: Cardiac Diseases In Pregnancy (1hr)
- 5. OG 11.1 Multiple Pregnancy (1hr)
- 6. OG 12.8: Rh Incompatibility (1hr)
- 7. OG 10.1 & 10.2: Antepartum Haemorrhage (2hrs)
- 8. OG 16.3: Fetal Growth Restriction (1hr)
- 9. Oligohydromnios & Polyhydromnios (1hr)
- 10. OG 13.2: Preterm Labour (1hr)
- 11. OG 13.2: Pprom / Prom (1hr)

### **B)** Desirable to know:

- 1) Dosages of drugs used for Hypertension in pregnancy
- 2) Safe & unsafe antihypertensives.
- 3) Differentiation between chronic Hypertension & PIH
- 4) Diagnosis of HELLP syndrome
- 5) Magnesium sulfate toxicity
- 6) Management of imminent eclampsia

- 7) Iron sucrose
- 8) Management of Non Iron deficiency anemia
- 9) Management of CCF
- 10) OGCT
- 11) Diagnosis of DIC
- 12) External cephalic version
- 13) Classical cesarean section
- 14) Complications of Monochorionic twins
- 15) Post maturity syndrome
- 16) Tests for fetal lung maturity
- 17) Types of decelerations
- 18) Sudden intra uterine death

### C) Nice to know:

- 1) Management of Hypertensive crisis in pregnancy
- 2) Management of HELLP syndrome
- 3) Management of cerebral edema
- 4) Ferric Carboxy Maltose
- 5) Oral hypoglycemic drugs for GDM
- 6) Management of DIC
- 7) Asynclitism
- 8) Internal podalic Version
- 9) Arrested breech delivery
- 10) Difficulties encountered during LSCS
- 11) TRAP, discordant twin
- 12) Selective fetal reduction

### **GYNAECOLOGY (25 HOURS)**

# 1<sup>st</sup> HALF

### A) MUST KNOW

- 1. OG 29.1 Fibroid Uterus (1hr)
- 2. OG 26.1 Endometriosis (1hr)
- 3. OG 26.1 Adenomyosis (1hr)
- 4. OG 24.1 Abnormal Uterine Bleeding (1hr)
- 5. OG 31.1 Prolapse Uterus (2hrs)
- 6. Infertility: OG 28.1 To 28.4 (3hrs)

Male Infertility (1hr)

Female Infertility (2hrs)

7. Contrception: (4 Hours)

Introduction, Types of Contraceptive Methods, Natural & Barrier Methods

(1hr)

OG 21.1 - Hormonal Contraceptive (1hr)

OG 19.4 – Intrauterine Devices (1hr)

A) OG 19.1 To 19.3 – Sterlization Methods In Both Male & Females

### **Desirable to know:**

- 1) Cervical fibroid, broad ligament fibroid
- 2) Laparoscopic myomectomy, myolysis
- 3) Details of conservative surgeries for DUB
- 4) Premature ovarian failure
- 5) Malpa's classification for prolapse
- 6) Details of sling surgeries
- 7) CDC criteria for diagnosis of PID
- 8) Treatment of endometriosis in infertile cases
- 9) Treatment of male infertility
- 10) Management of genital fistula

**DURATION: 12 HOURS** 

### **B)** Nice to know:

- 1) Uterine artery embolisation
- 2) Ormiloxifene
- 3) POP-Q classification for prolapse
- 4) Recent techniques in diagnosis of genital tuberculosis
- 5) Staging of endometriosis
- 6) Scar endometriosis
- 7) Artificial reproduction techniques(ART)
- 8) Newer treatment modalities for chronic pelvic pain
- 9) NDVH-Non descent vaginal hysterectomy
- 10) Types of Abdominal hysterectomy

2<sup>nd</sup> HALF

# **OBSTETRICS (HIGH RISK PREGNANCY)**

### A) MUST KNOW

- 1. OG 13.2: Post Dated Pregnancy (1hr)
- 2. OG 14.3: Previous Lscs (1hr)
- 3. Intrauterine Death (1hr)
- 4. Teenage Pregnancy; Elderly Primigravida & Grand Multipara (1hr)
- 5. OG 13.1: Induction Of Labour (1hr)
- 6. OG 15.1 & 15.2 Operatve Obstetrics (4 Hours)

Cervical Encircalage & Episotomy (1hr)

Forceps And Vaccum Delivery (1hr)

Lscs (1hr)

Assissted Breech Delivery & Ecv (1hr)

- 7. Gynaecological Problems In Pregnancy (1hr)
- 8. OG 12.9 Surgical Complications In Pregnancy (1hr)
- 9. Shock In Obstetrics (1hr)

### C) Nice to know:

- 1) Labour analgesia
- 2) Management of cervical tear
- 3) Management of vault tear
- 4) DVT in puerperium

# GYNAECOLOGY DURATION: 12 HOURS A) MUST KNOW

- 1. OG Benign & Pre-Malignant Leisons of Vulva & Vagina (1hr)
- 2. OG Carcinoma Vulva & Vagina (1hr)
- 3. OG Benign & Pre-Malignant Leisons of Cervix (1hr)
- 4. OG 33.1 To 33.4: Carcinoma Cervix (1hr)
- 5. OG 34.1: Pre-Malignant Leisons & Carcinoma Endometrium (1hr)
- 6. OG 34.2: Benign & Malignant Leisons of Ovary (2hrs)
- 7. OG 34.3: Gestational Trophoblastic Neoplasia (1hr)
- 8. OG 32.1 To 32.2: Post Menopausal Bleeding (1hr)
- 9. OG 34.4 Operative Gynaecology (3hrs)

Minor Operative Procedures (1hr)

Major Operative Procedures (1hr)

Hysteroscopy & Laproscopy (1Hr)

# **SEMINARS (30 TOPICS)**

### **OBSTETRICS (15 HOURS)**

# 1<sup>st</sup> HALF

- 1. OG 9.5 Hyperemesis Gravidarum Seminar
- 2. OG 8.3 Antenatal Assessment Of Fetal Well-Being
- 3. OG 13.1 Intrapartum Fetal Monitoring
- 4. OG 13.1: Induction Of Labour
- 5. OG 14.4: Uterine Dysfunction
- 6. OG 13.2 Preterm Labour
- 7. OG 13.2 Prom; Pprom
- 8. OG 13.2 Post Term Pregnancy

# 2<sup>nd</sup> HALF

- 9. OG 16.3 Fetal Growth Restriction
- 10. (NOT IN CBME) Intrauterine Death
- 11. OG 11.1 Multiple Pregnancy
- 12. OG 18.3 Birth Asphyxia
- 13. (NOT IN CBME) Gynaecological Problems In Obstetrics
- 14. OG 17.1 & 17.2 Breast Feeding Symposium
- 15. (NOT IN CBME) Teenage Pregnancy; Elderly Preimigravida & Grand Multiparity Symposium

### **GYNAECOLOGY (15 TOPICS)**

### **1st HALF**

- 1. OG 28.1 To 28.4 Infertility I
- 2. OG 28.1 To 28.4 Infertility Ii
- 3. OG 30.1 Polycystic Ovarian Diseases
- 4. OG 26.1 Endometriosis
- 5. OG 23.1: Physiology Of Menstruation
- 6. OG 24.1 Abnormal Uterine Bleeding
- 7. OG 34.4: Minor Operative Procedures
- 8. OG 34.4: Major Operative Procedures

# 2<sup>nd</sup> HALF

- 9. OG 32.1 & 32.2 Menopause & Hormone Replacement Theraphy
- 10. (Not In Cbme) Hormones In Gynaecology
- 11. OG 26.2 Gynaecological Fistulas
- 12. (NOT IN CBME) Endoscopy In Gynaecology
- 13. (NOT IN CBME) Imaging In Gynaecology
- 14. (NOT IN CBME) Radiotheraphy In Gynaecology
- 15. (NOT IN CBME) Chemotheraphy In Gynaecology

### **SMALL GROUP DISCUSSION (SGD) – 30 TOPICS**

### **OBSTETRICS (15 TOPICS)**

#### **DURATION: 60 HOURS**

# 1<sup>st</sup> HALF

- 1. OG 14.1 Female Pelvis {Contracted Pelvis &Cpd}- Skill Based Teaching
- 2. OG 14.2 Mechanism Of Normal Labour & Management Skill Based Teaching
- OG 14.4 Mechanism Of Abnormal Labour {Op/Face/Transverse Lie}-Skill Based Teaching
- 4. OG 15.2 Mechanism Of Labour In Breech Skill Based Teaching
- 5. OG 13.1 Partograph
- 6. OG 15.1 & 37.6 Forceps & Ventouse Skill Based Teaching
- 7. OG 16.1 & 16.2 Complications Of Third Stage Of Labour Skill Based Teaching
- 8. OG 14.1 & 14.2 Cpd & Obstructed Labour

# 2<sup>nd</sup> HALF

- 9. OG 12.4 Cardiac Diseases In Pregnancy
- 10. OG 12.8 Rh Incompatibility
- 11. OG 12.3 Diabetes In Pregnancy
- 12. OG 10.1 & 10.2 Abruptio Placenta
- 13. OG 10.1 & 10.2 Placenta Previa
- 14. (NOT IN CBME) Polyhydromnios & Oligohydromnios
- 15. OG 8.7 Immunization In Pregnancy

### **GYNAECOLOGY (15 HOURS)**

# 1<sup>st</sup> HALF

### **DURATION: 8 HOURS**

- 1. OG 29.1 Fibroid Uterus
- 2. OG 31.1 Prolapse Uterus
- 3. OG 22.1 & 22.2 White Discharge Per Vagina
- 4. OG 27.4 Pelvic Inflammatory Diseases
- 5. OG 27.1 Sexually Transmitted Diseases
- 6. OG 34.2 Beningn Ovarian Tumours
- 7. OG 33.1 To 33.4 Carcinoma Cervix
- 8. OG 34.1 Carcinoma Endometrium

# 2<sup>nd</sup> HALF

### **DURATION: 7 HOURS**

- 9. OG 34.2 Malignant Ovarian Tumours
- 10. (NOT IN CBME) Carcinoma Vulva & Vagina
- 11. OG 34.3 Gestational Trophoblastic Tumour
- 12. (NOT IN CBME: OG 32.1-32.2) Post Menopausal Bleeding
- 13. OG 26.1 Adenomyosis
- 14. (NOT IN CBME) Surgical Complications In Pregnancy
- 15. (NOT IN CBME) Low Back Ache

### **INTEGRATED TEACHING (6 TOPICS)**

# 1<sup>st</sup> HALF

### **DURATION: 6 HOURS**

- OG 27.2 Tuberculosis Of Genital Tract Pathology; Chest & Tb; Surgery & Obg
- OG 12.9 Acute Abdomen In Pregnancy Cmo; Surgery & OBG

3. OG 8.4 – Neonatal Resucitation

Paediatrics & OBG

# 2<sup>nd</sup> HALF

### **DURATION: 6 HOURS**

- 4. OG 9.4 Ultrasonograhy Radiology & OBG
- OG 12.1 Hypertension In Pregnancy Physiology; Medicine & OBG
- Og 12.2 Nutrition & Anaemia In Pregnancy Biochemistry; Pathology; Medicine & OBG

### SELF DIRECTED LEARNING(SDL) – 15 HOURS

# 1<sup>st</sup> HALF

### **DURATION: 8 HOURS**

- 1. OG 12.1 Hypertension In Pregnancy
- 2. OG 12.2 Anaemia
- 3. OG 12.3 Gestational Diabetes
- 4. OG 8.1 To 8.9 Antenatal Care
- 5. OG 11.1 Multiple Pregnancy
- 6. OG 10.1 & 10.2 Antepartum Haemorrhage
- 7. OG 9.1 To 9.3 Abortions
- 8. OG 13.1 Prolapse Uterus

# 2<sup>nd</sup> HALF

### **DURATION: 7 HOURS**

- 9. OG 29.1 Fibroid Uterus
- 10. OG 34.2 Ovarian Tumours
- 11. OG 28.1 To 28.4 Infertility
- 12. OG 24.1 Abnormal Uterine Bleeding
- 13. OG 21.1 & 21.2 Hormonal Contraception
- 14. OG 21.1 & 21.2 Intrauterine Contraceptive Devices
- 15. OG 33.1 To 33.4 Carcinoma Cervix

### **SKILL LAB TOPICS**

- 1. OG 6.1 Urine Pregnancy Test
- 2. 15.1 & 37.6 Operative Deliveries (Forceps / Vaccum)
- 3. OG 35.14 & 15.1 15.2 Episotomy
- 4. OG 18.2 Neonatal Resucitation
- 5. OG 16.1 & 16.2; Og 35.15 Complications Of Third Stage Of Labour
- 6. OG 19.4 & 35.15 Copper T Insertion & Removal
- 7. OG 33.3 Screening For Carcinoma Cervix
- 8. OG 35.11 Universal Precautions For Hiv & Hepatitis
- 9. OG 35.12 Pap Smear
- 10. OG 35.13 Artificial Rupture Of Membranes
- 11. OG 35.17 Urinary Cathetarization
- 12. OG 15.1 & 37.6 Assisted Breech Delivery

	LECTURE (Hours)	SEMINAR / SYMPOSIUM/ PANEL(Hours)	TUTORIAL / GROUP DISCUSSION / PBL (Hours)	SDL(Hours)	INTEGRATE D(Hours)
II PHASE	25				2 (1 TOPIC)
1 <sup>st</sup> HALF	13				
2 <sup>nd</sup> HALF	12				
III/I PHASE	25	20 (10 TOPICS)	20(10 TOPICS)	5	6 (3 TOPICS)
1 <sup>st</sup> HALF	13	10	10	3	4
2 <sup>nd</sup> HALF	12	10	10	2	2
III/II PHASE	50	60	60	15	12
1 <sup>st</sup> HALF	25	30 (8 OBS & 7 GYNAEC)	30(8 OBS & 7 GYNAEC)	10	6 (3 TOPICS)
2 <sup>nd</sup> HALF	25	30 (7 OBS & 8 GYNAEC)	30(7 OBS & 8 GYNAEC)	5	6(3 TOPICS)
TOTAL	100	80	80	20	20 = 300 HOURS

# **CLINICAL POSTING SYLLABUS**

# **<u>1 ST</u>** POSTING

### **Obstetrics**

- 1. Orientation to clinical posting & different Wards.
- 2. Various definitions used
- 3. History taking
- A. Antenatal case
- B. Postnatal case

### 4. General physical examination & obstetric examination

5. Diagnosis of pregnancy

A. 1<sup>st</sup> Trimester
B. 2<sup>nd</sup>
C. 3<sup>rd</sup> Trimester

6. Antenatal checkup

A. 1<sup>st</sup> Trimester B.2<sup>nd</sup> & 3<sup>rd</sup> Trimester

### **Gynaecology**

- 1. Various definitions used
- 2. History taking for gynecology case
- 3. General physical examination
- 4. Introduction to menstrual disorders

### <u>Skills Lab</u>

- 1. Obstetric examination (Grips)
- 2. Gynaec examination (per speculum & per vaginal)

### Procedures to be observed in OPD/Wards

- 1. Urine pregnancy test
- 2. Per speculum
- 3. Per vaginal examination

# 2<sup>ND</sup> POSTING

# **Obstetrics:**

- 1. Normal labour
- 2. Normal puerperium
- 3. Abortion's & MTP
- 4. Hyperemesis

# **Gynaecology**

- 1. Leucorrhoea
- 2. WDPV
- 3. Menstrual disorders
- 4. Pain abdomen & D/D in Gynecological cases
- 5. PID
- 6. Introductions to instruments in OT Complex

# <u>Skill Lab</u>

Obstetric examination (Revision)

- Obstetric grips
- Lie
- Presentation
- Position
- Period of gestation
- Grips

# Procedures to be observed in OPD/Wards

- 1. Per speculum examination
- 2.Per vaginal examination
- 3.Pap smear
- 4. Vaginal smear

### **3<sup>RD</sup> POSTING**

### **Obstetrics**

- 1. Anemia
- 2. Hypertensive disorder in pregnancy
- 3. Cephalo pelvic disproportion
- 4. Multiple pregnancy
- 5. Gestational diabetes mellitus
- 6. Cardiac diseases in pregnancy
- 7. Dummy pelvis
- 8. Instruments & drugs
- 9. Specimens

### **Gynaecology**

- 1.Mass per vagina (Prolapse)
- 2. Mass per abdomen (Fibroid & Benign ovarian tumors)
- 3. PID
- 4. AUB
- 5. Adenomyosis
- 6. Evaluation of primary & Secondary amenorrhea
- 7. Instruments & Drugs
- 8. Specimens

### Procedures to be observed in OPD/Ward

CTG/NST
 Cervix stitch removal
 Stripping of membranes
 Pelvic assessment
 Tests to assess CPD
 External cephalic version
 OGCT-OPD
 Bedside urine albumin
 wound dressing
 Suture removal

### <u>Skill Lab</u>

Mechanism of labour –occipito anterior
 Abnormal labour
 Occipito posterior & deep transverse arrest
 Breech
 Face & Brow
 Management of different stages of labour
 Steps of episiotomy

# **4<sup>TH</sup> POSTING**

### **Obstetrics:**

- 1.Complications of 3<sup>rd</sup> stage of labour
- 2. Abnormal Puerperium
- 3. VBAC
- 4. Operative procedures
  - Steps of CS
  - D & E
  - D & C
  - Cervical enceralege
- 5. Antenatal assessment of fetal well being
  - Demonstration of NST/CTG

-USG

- 6. Dummy pelvis
- 7. Instruments & Drugs
- 8. Specimens

### **Gynaecology**

- 1. Family planning
- 2. Carcinoma cervix
- 3. Carcinoma ovary
- 4. Carcinoma endometrium
- 5. Infertility male, Female
- 6. GTN
- 7. Instruments & drugs
- 8. Specimens

### Skill Lab

- 1. Complications of 3<sup>rd</sup> stage labour
- 2. Instrumental delivery
- 3. Cu-T insertion
- 4. Introduction of laprosocpy

# **Operative procedures demonstrated in OT/Ward**

### **Gynaecology**

- 1. Steps of Abdominal hysterectomy
- 2. Steps of vaginal hysterectomy
- 3.Dilatation encirclase
- 4. Fractional Cruettage
- 5. Cauterization of cervix.
- 6.Fothergills repair
- 7. Staging laparotomy for ovarian tumours
- 8. Diagnostic hysteroscopy & laparoscopy for evaluation of infertility
- 9. Laparoscopic sterilization/abdominal tubectomy.

### **Obstetrics**

- 1.Steps of cesarean section
- 2.Dilatation & evacuation (MTP)
- 3.Cervical encerclage

### Labour room posting observed/done

- 1.Assessment of cervical dilatation
- 2.Pelvic assessment
- 3.Artificial rupture of membrane
- 4.Perineal support
- 5.Conduct normal delivery in low risk patients
  - -Active management of third stage of labour
  - -Basic resuscitative measured in obstetrics emergencies (Eclampsia, PPH, Shock)
- 5.Episitomy suturing
- 6.CTG mounting
- 7. Forceps application
- 8.vaccum application
- 9.Cesarean section
- 10.Neonatal Resuscitation

# NOTE:

**Student Doctor method of clinical training** will be followed by allotting beds to respective students in II/III and IV clinical posting.

REMEDIAL MEASURES FOR SLOW LEARNERS:

- 1. Lectures
- 2. Assignments
- 3. Tests

# **AETCOM MODULES:**

Module 4.2: Case studies in medico-legal and ethicalsituations

### Background

This module discusses the medico-legal and ethical conflicts in adolescents (also seemodule 2.5).

#### **Competency addressed**

The student should be able to:	Level
Identify, discuss and defend medico-legal, socioeconomic and ethical issues as it pertains to abortion / Medical Termination of Pregnancy and reproductive rights	

### **Learning Experience**

Year of study: Professional year 4

### Hours: 5

- i. Introduction of case 1 hour
- ii. Self-directed learning 2 hours
- iii. Anchoring lecture 1 hour
- iv. Discussion and closure of case -1 hour

### Case: The Child's Child

You are the family doctor of Mr. Ravikiran for the past 10 years. One evening toward the end of a busy clinic Mr. Ravikiran, his wife and daughter come in. The usual smiles were absent. There was silence for a few minutes and when you asked what is the matter, Mr. Ravikiran points out to his wife and tells her that you tell him.

Reluctantly and with tears bursting in her eyes she tells you that her only daughter Sapna who is 16 years old had amenorrhea for 4 months. She had taken her to the gynecologist, who after examining her ordered an ultrasound scan of the abdomen which showed a 16 week fetus. After much argument and discussion, the family requested the gynecologist to perform a Medical Termination of Pregnancy (MTP). Sapna, however refuses to undergo an MTP - claiming that the child is her expression of love and that she believes that taking away her baby's life will be tantamount to murder.

The parents are embarrassed to face society and feel that continuing the pregnancy will harm the daughter. As parents, they feel that they have a right to determine if their daughter should undergo a Medical Termination of Pregnancy or not. The daughter feels that she is old enough. As their family doctor, they would like you to help them through this nightmare.

### **Points for discussion:**

- 1. Who makes health care decisions for adolescents?
- 2. What are the medical implication of the MTP act?
- 3. Are there provisions for emancipated minors?
- Should adolescents be included in the decision making process?
   Assessment
- 1. **Formative:** The student may be assessed based on their active participation in thesessions.
- 2. Summative: Short questions on the Medical Termination of Pregnancy Act

# Module 4.5: Case studies in ethics: the doctor-industry relationship

### Background

This module discusses some nuances in the doctor-industry relationship (also see module 2.5).

### **Competency addressed**

The student should be able to:	Level
Identify and discuss and defend medico-legal, socio-cultural, professional andethical issues in physician - industry relationships	KH

### **Learning Experience**

Year of study: Professional year 4

### Hours: 5

- i. Introduction of case 1 hour
- ii. Self-directed learning 2 hours
- iii. Anchoring lecture 1 hour
- iv. Discussion and closure of case -1 hour

# **Case: The Launch**

It was the end of the morning session in your clinic. You were getting ready to have lunch when you are told that a drug company representative wants to meet you. You let him in and he tells you. "Sir - we are launching a new combination drug next month. We are planning a one hour meeting to introduce you to the product. The meeting will be held in Singapore and we will fly you and your spouse business class. All expenses will beborne by us. You can stay there for 3 days, sir. The meeting will be held in a cruise ship. The meeting will be only for one hour, sir. After that there will be a gala dinner and entertainment, Sir. Also, to compensate you for losing your practice for those three days we will pay you an honorarium of Rs. 25000 for each day that you are there. This is our way of saying thank you for all the support in the past and the support that you are going to provide in making this new molecule a success."

### **Points for discussion:**

- 1. The influence of pharmaceutical industry on doctor's prescription behavior.
- 2. The limits of doctor industry engagement.

### Assessment

- 1. **Formative:** The student may be assessed based on their active participation in thesessions.
- 2. **Summative:** Short questions on 1) Can doctors accept gifts from pharmaceuticalindustry? Explain your choice.

### Resources

The MCI & AMA Code of Medical Ethics.

# **ASSESSMENT:**

# TOPIC DISTRIBUTION FOR PAPER I & II INCLUDING AETCOM QUESTION:

### PAPER-I (OBSTETRICS)

TOTAL MARKS: 100

TOPIC	MARKS	
General obstetrics	20	
High risk	50	
Abnormal labour	15	
Operative obstetrics & MTP	10	
Recent advances	5	

# PAPER-II (GYNAECOLOGY)

### TOTAL MARKS: 100

TOPIC	MARKS
Development of genital tract & its	5
abnormalities	
Reproductive endocrinology	25
Genital infections	10
Genital lesions (benign & malignant)	25
Endometriosis & infertility	10
Urogynaecology	10
Contraception	5
Operative gynaecology	5
Recent advances	5

# **Theory Model Question Paper:**

# **OBSTETRICS:** Paper-1

# Max Marks: 100

MCQ		20	Marks
<ol> <li>Weight of placenta at term is</li> <li>a. 500gm</li> <li>c. 1200gm</li> </ol>	b. 1000gm d.1500gm	[	]
<ul><li>2. Shortest diameter is</li><li>a. Diagonal conjugate</li><li>c. True conjugate</li></ul>	b. Obstetric conjugate d. All are equal	[	]
<ul><li>3.Longest diameter of fetal skull is</li><li>a. Biparietal</li><li>c. Occipito temporal</li></ul>	b. Bitemporal d. Submentovertical	[	]
<ul><li>4.HCG is secreted by</li><li>a. Trophoblast cells</li><li>c. Fetal yolk sac</li></ul>	b. Amniotic membrance d. Hypothalamus	[	]
5.Net weight gain in pregnancy is a. 11lb c. 36 lb	b. 24 lb d. 42 lb	[	]
<ul><li>6. Which is not secreted by placenta</li><li>a. HPL</li><li>c. Protacin</li></ul>	b. HCG d. Progesterone	[	]
<ul><li>7. Transvaginal USG can detect fetal cardia</li><li>a. 6weeks</li><li>c. 8 weeks</li></ul>	ac activity in b. 7 weeks d. 10weeks	[	]
<ul><li>8. Definitive sign of pregnancy</li><li>a. Uterine soufflé</li><li>c. Fetal heart sound</li></ul>	b. Ballottement d. Amenorrhea	[	]
<ul><li>9.Which is not a feature of pseudocyesis</li><li>a. Amenorrhoea</li><li>c. Fetal heart sounds are audible</li></ul>	b. Abdominal distension d. None	[	]

<ul><li>10. Pelvic examination is not done in</li><li>a. Placenta previa</li><li>c. H. Mole</li></ul>	<ul><li>b. Contracted pelvis</li><li>d. Ectopic pregnancy</li></ul>	[	]
<ul><li>11. Duration of pregnancy from LMP is</li><li>a. 280 days</li><li>c. 270 days</li></ul>	b. 284days d. 290 days	[	]
<ul><li>12. Uterus becomes abdominal organ by</li><li>a. 10weeks</li><li>c. 12 weeks</li></ul>	b. 8 weeks d. 16 weeks	[	]
<ul><li>13. Urine pregnancy test is based on the pr</li><li>a. HCG</li><li>c. Both</li></ul>	esence of b. AFP d. none of the above	[	]
<ul><li>14. In oligohydramaios AFI is less than</li><li>a. 8</li><li>c. 10</li></ul>	b. 5 d. 7	[	]
<ul><li>15. Most common presentation is</li><li>a. Cephalic</li><li>c. Shoulder</li></ul>	b. Podalic d. None of the above	[	]
<ul><li>16. Denominator in face presentation is</li><li>a. Occiput</li><li>c. sacrum</li></ul>	b. mestum d. acromion	[	]
<ul><li>17. The part of the fetus which occupies the</li><li>a. Lie</li><li>c. presenting part</li></ul>	e lower pole of the uterus is b. presentation d. Attitude	[	]
<ul><li>18. Height of the uterus is more than the pe</li><li>a. Twins</li><li>c. Big baby</li></ul>	riod of amenorrhoea in all except b. Polyhydramnios d. IUGR	[	]
<ul><li>19. The part of the presentation which over</li><li>a. presenting part</li><li>c. lie</li></ul>	lies the internal OS is b. presentation d. attitude	[	]
<ul><li>20. Incidence of breech at term is</li><li>a. 96.5%</li><li>c. 0.05%</li></ul>	b. 3% d. 20%	[	]

10 marks

### I.LONG QUESTIONS

1. What is antepartum hemorrhage? What are the causes. Discuss the diagnosis, and management of placenta previa at 32 weeks of pregnancy. (1+2+2+5)

2. Discuss the stages & conduct of labour (3+7)

# II. SHORT ESSAYS

- 2. Rh isoimmunization.
- 3. Active management of 3<sup>rd</sup> stage of labour.
- 4. Complications of twin pregnancy
- 5. Investigation in pregnancy.
- 6. Cervical incompetence.

### **III.SHORT ANSWERS**

- 7. Indication for forceps delivery.
- 8. Episiotomy care
- 9. Complications of anemia in pregnancy.
- 10. Immunization in pregnancy.
- 11. Iron prophylaxis in pregnancy
- 12. IUCD complications
- 13. APGAR score
- 14. Supperssion of lactation

### 15. Hydrocephalus

16. Badl's ring

05x3=15 marks

05X5=25 marks

### **Gynaecology: Paper-II**

### Max. Marks: 100 MCQ

(20 Marks)

1. Ligamentum teres is formed from:

a. Umbilical Artery	b. Umbilical Vein
c. Urachus	d. Persistent vitellointestinal duct

2. Ferming of cervical mucus disappears after-days of menstrual cycle:

a. 7 <sup>th</sup>	b. 15 <sup>th</sup>	
c. 18 <sup>th</sup>	d. 21 <sup>st</sup> .	e. 25 <sup>th</sup>

- 3. Apoptosis can occur by change in hormone levels in the ovarian cycle. Where there is no fertilization of the ovum, the endometrial cells die because:
  - a. The involution of corpus luteum causes estradiol and progesterone levels to fall dramatically:
  - b. LH levels rises after ovulation,
  - c. Estradiol levels are not involved in the LH surge phenomenon,
  - d. Estradiol inhibits the induction of the progesterone receptor in the endometrium.
- 4. The most serious complication of clomiphene therapy for induction of ovulation is:
  - a. Bone marrow depression b.Hyperstimulation syndrome
  - c. Secondary Amenorrhea d. Multiple pregnancy
- 5. The Probable source of relaxin is:

a. Ovary	b. adrenal cortex	
c. Liver	d. Bartholins glands	e. anterior pituitary

- 6. Estrogen administration in a menopausal women increases the:
  - a. Gonadotrophin secretion b. LDL cholesterol
  - c. Bone mass d. Muscle mass
- 7. Withdrawal bleeding occurs when progestin's administered continuously:
  - a. Estrogen concentration is sufficient.
  - b. Structural abnormality in the pelvis
  - c. Associated with endocrine disorder
  - d. Atrophic endometrium
- 8. TRUE about RU-486 is:
  - a. Used for inducing abortion in early week of pregnancy
  - b. Used along with contraception pill
  - c. Acts on the cytoplasmic receptor
  - d. Used for preventing ectopic implantation

- 9. A 49 year old woman presents because of night fever. She reports waking up drenched with sweat two to three times per week for the past month. Her menstrual cycles have become irregular for past several months. She has been feeling tired and irritable lately. For which of the following will short term therapy with HRT be indicated:
  - a. Prevention of coronary heart disease.
  - b. Prevention of dementia
  - c. Prevention of osteoporosis
  - d. Prevention of hot flashes
- 10. Kali rani a 20yr old girl presents with history of rapidly developing hirsutism and amenorrhea. To establish the diagnosis you would like to proceed with which of the following tests in blood:

a. 17-OH progesterone	b. DHEA
c. Testosterone	d. LH:FSH ratio

11. Treatment of Hirsutism in PCOD drugs used are:

a. Menopausal Gonadotropin	b. GnRH
c. Spironolactone	d. Hcg

12.Ovary develop from:

a. Mullerian duct	b. Genital ridge	
c. Genital tubercle	d. Mesonephric duct	e. Sinovaginal bulbs

13. Which of the following condition does not present with both mullerian and wolffian duct structure?

a. Antimullerian hormone deficiency	b. FsH receptor mutation
c. Ovotesticular syndrome	d. Mixed gonadal dysgenesis

14.Commonest reason of adherent labia minora in a newborn is:

a. Female pseudohermaphroditism	b. Testicular feminization
c. Vaginal atresia	d. Agglutination of labia

15. Cochleate uterus is:	
a. Acute antiflexion	b. Acute retroflexion
c. Acute retroversion of uterus	d. None of the above.

### 16.During sexual differentiation in males:

- a. Leydig cells produce mullerian Inhibiting substance
- b. Primitive Gonads differentiate into testis due to the presence of SRY gene
- c. Androgen binding protein is responsible for the development of male external Genitalia
- d. Wolffian duct regresses.

17. 16 year old female presents with primary amenorrhea with B/L inguinal hernia. She has normal sexual development with no pubic hair. USG shows no uterus and ovaries and a bind vagina. Diagnosis:

- a. Turner's syndrome b. Mullerian agenesis
- c. STAR syndrome d. Androgen insensitivity syndrome.

18. Young male presents with delayed puberty with decreased FSH, LH, and testosterone. Which of the following is NOT possible?

- a. Kallmann syndromeb. Klinefelter's syndromec. Constitutional delayd. Dax-1 gene mutation
- 19. All of the following cause hirsutism except:a. Addison diseaseb. Arrhenoblastomac. Streptomycind. Acromegaly

20. A female presents with primary amenorrhea and absent vagina, the next investigation to be done is:

a. LH/FSH assay	b.Chromosomal analysis
c. urianalysis	d. Laparoscopy

### LONG ESSAYS

### 2x10=20marks

5x10=50marks

3x10=30marks

- 1. what are the causes of menorrhagia? Write about diagnosis and management of Fibroid uterus in 30 yrs old women.
- 2. Enumerate the causes of female Infertility. Write the treatment for Anovulatory Infertility.

### **Short Essays**

- 3. Clinical features and differential diagnosis of carcinoma of cervix.
- 4. Side effects and contraindications of O.C.Pills.
- 5. Evaluation of a case of pathological Leucorrhoea.
- 6. Different types of fibroid uterus & their complications.
- 7. Management of nulliparous prolapse.
- 8. Causes of secondary Amenorrhoea and management.

### Short Answers (Leave 3 Lines gap between answers)

- 9. Leukoplakia vulva.
- 10. Clinical features of endometriosis.
- 11. Bicornuate uterus.

### 12. Premenstrual syndrome

- 13. Bartholin Abscess.
- 14. Treatment of PCOD.
- 15. Causes of vesico vaginal Fistula.
- 16. Indications and side effects of methotrexate.

Practical Examination: 160 marks Two cases

### (One long case of Obstetrics and one long case of Gynecology - 80 marks each)

### The distribution of marks for clinical cases

History taking- 15 marks

Clinical examination-15 marks

Probable diagnosis based on history and examination- 20 marks

Relevant investigations- 10 marks

Management- 20 marks

Viva-voce: 40 marks

### **Components are:**

Instruments	-10
Specimen,X-ray,USG	-10
Dummy & pelvis	-10
Family planning & drugs	-10

### Suggested cases for practical examination:

### A) Obstetrics:

- 1) Normal antenatal case
- 2) Normal postnatal case
- 3) Post Cesarean case
- 4) Previous LSCS
- 5) Hyper emesis gravidarum
- 6) Anemia in pregnancy
- 7) Hypertension in pregnancy
- 8) Preterm labour
- 9) Rh negative pregnancy

- 10) Cardiac disease in pregnancy
- 11) Twin pregnancy
- 12) Malpresentations (breech)
- 13) Abortion

# **B)** Gynecology:

- 1) Mass per abdomen
- 2) Mass per vagina (Prolapse)
- 3) White discharge per vagina
- 4) Postmenopausal bleeding
- 5) Fibroid
- 6) Adenomyosis
- 7) DUB
- 8) Ca cervix
- 9) Ovarian tumors
- 10) PID
- 11) Infertility

### LOG BOOK

### "LOG BOOK (Clinical Postings)"

### BLDEU'S SHRI B.M. PATIL MEDICAL COLLEGE & RESEARCH CENTER DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY (To be supervised by concerned unit, day to day)

STUDENT NAME:

UNIVERSITY ROLL NO:

DATE OF POSTING: FROM: TO:

CLASS ROLL NO:

# I POSTING- III TERM

### **ORIENTATION PROGRAMME( 2 WEEKS)**

\*Attended / Not attended ( reason.....)

[A] OPD cases observed:

Sl. No.	Diagnosis	Date	Staff Sign with
			Name
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

# [B] Case presentations attended:

Sl.No.	Diagnosis	Date	Staff Sign with
			Name
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

# [C] CASES PRESENTED:

Sl. No.	Diagnosis	Date	Staff Sign with Name
1			
2			
3			
4			
5			

# [D] SKILL LAB:

Sl. No.	Topics	Date	Staff Sign with Name
1			
2			
3			

[E] Procedures observed in OPD &Wards :

		Staff Sign with name and date				
SI.	Procedure	1	2	3	4	5
No.						
1	Urine pregnancy test					
2	Per Speculum examination					
3	Per vaginal examination					

# **EVALUATION:**

[A] Day to day Assessment : /20.

[B] Ward Leaving test :

Remarks by Unit Chief:

Signature of Unit Chief with seal

# "LOG BOOK (Clinical Postings)"

# BLDEU'S SHRI B.M. PATIL MEDICAL COLLEGE & RESEARCH CENTER

# DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

# (To be supervised by concerned unit, day to day)

STUDENT NAME:

UNIVERSITY ROLL NO:

DATE OF POSTING: FROM: TO: CLASS ROLL NO:

# II POSTING- IV TERM

[A] OPD cases observed:

Sl. No.	Diagnosis	Date	Staff Sign with
			Name
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

# [B] Case presentations attended:

Sl. No.	Diagnosis	Date	Staff Sign with
			Name
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

# [C] CASES PRESENTED:

Sl. No.	Diagnosis	Date	Staff Sign with
			Name
1			
2			
3			
4			
5			

# [D] SKILL LAB:

Sl. No.	Topics	Date	Staff Sign with Name
1			
2			
3			
4			
5			

# [E] Procedures observed in OPD &Wards :

		Staff sign with Name & date			& date	
SI.	Procedure	1	2	3	4	5
No.						
1	Per speculum Examination					
2	Per vaginal Examination					
3	Pap smear					
4	Vaginal Swab					

# **EVALUATION:**

[A] Day to day Assessment : /20.

[B] Ward Leaving test :

Remarks by Unit Chief:

Signature of Unit Chief with seal

# "LOG BOOK ( Clinical Postings)"

# BLDEU'S SHRI B.M. PATIL MEDICAL COLLEGE & RESEARCH CENTER

# DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

# (To be supervised by concerned unit, day to day)

STUDENT NAME:

UNIVERSITY ROLL NO:

DATE OF POSTING: FROM: NO: TO:

CLASS ROLL

# III POSTING- VIII TERM

# [A]Case Presentations attended :

Sl. No.	DATE	STAFF SIGNATURE
		WITH NAME
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

# [B] Cases Presented:

Sl. No.	Diagnosis	Date	Staff Sign with Name
1			
2			
3			
4			
5			

# [C] Rounds attended:

Sl. No.	DATE	Staff Sign with Name
1		
2		
3		
4		
5		
6		
7		
8		

# [D] SKILL LAB:

Sl. No.	Topics	Date	Staff Sign with
			Date
1			
2			
3			

[E]

Sl. No.	Topics	Date	Staff Sign with Name
1	DRUGS		
2	CONTRACEPTION		
3	SPECIMENS		
4	INSTRUMENTS		

		Staff	Sign with 1	Name			
Sl.	Procedure	1	2	3	4	5	
No.							
1	CTG/NST						
2	Cervical Stitch Removal						
3	Stripping of membranes						
4	Pelvic assessment						
5	Tests to assess CPD						
6	USG						
7	OGCT-OPD						
8	Bed side Urine albumin						
9	Wound dressing						
10	Suture removal						

# [F]Procedures observed in OPD & Wards:

# [G] OT Procedures

SI.	DIAGNOSIS	Procedure	O/A	Date	Staff Sign
No.					with Name
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

O- Observed

A-Assisted

# **EVALUATION:**

[A] Day to day Assessment : /20. test :

[B] Ward Leaving

Remarks by Unit Chief : Chief with seal Signature of Unit

# "LOG BOOK ( Clinical Postings)"

# BLDEU'S SHRI B.M. PATIL MEDICAL COLLEGE & RESEARCH CENTER

# DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

# (To be supervised by concerned unit, day to day)

STUDENT NAME: UNIVERSITY ROLL NO:

DATE OF POSTING: FROM: TO: CLASS ROLL NO:

# IV POSTING- IX TERM

# [A]Case Presentations attended:

Sl. No.	DATE	STAFF SIGNATURE
		WITH NAME
1		
2		
3		
4		
5		
6		
7		
8		

[B] Case Presented:

Sl. No.	Diagnosis	Date	Staff Sign with Name
1			
2			
3			
4			
5			

# [C] Rounds attended:

Sl. No.	DATE	Staff Sign with Name
1		
2		
3		
4		
5		
6		
7		
8		

# [D] SKILL LAB:

Sl. No.	Topics	Date	Staff Sign with Name
1			
2			
3			
4			

**[E]** 

Sl. No.	Topics	Date	Staff Sign with Name
1	DRUGS		
2	CONTRACEPTION		
3	SPECIMENS		
4	INSTRUMENTS		

Obstetrics & Gynecology

#### [F] Procedures observed in OPD & Wards

Sl. No.	Procedure	Date	Staff Sign with
			Name
1	CTG/NST		
2	Cervical Stitch Removal		
3	Stripping of membranes		
4	Pelvic assessment		
5	Tests to assess CPD		
6	USG		
7	OGCT-OPD		
8	Bed side Urine albumin		
9	Wound dressing		
10	Suture removal		

#### [G] OT Procedures

Sl.	DIAGNOSIS	Procedure	O/A	Date	Staff Sign
No.					with Name
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

O-Observed

A-Assisted

# **EVALUATION:**

[A] Day to day Assessment : /20. test :

Remarks by Unit Chief : Chief with seal Signature of Unit

[B] Ward Leaving

CLASS ROLL

# LABOUR ROOM COMPLETION CARD

# BLDEU'S SHRI B.M. PATIL MEDICAL COLLEGE & RESEARCH CENTER

# DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

#### (To be supervised by concerned unit, day to day)

STUDENT NAME: UI

UNIVERSITY ROLL NO:

DATE OF POSTING: FROM: TO: NO:

#### [A] VAGINAL DELIVERIES ASSISTED

Sl. No.	DIAGNOSIS	Date	Staff Sign with Name
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

# [B] VAGINAL DELIVERIES PERFORMED

Sl. No.	DIAGNOSIS	Date	Staff Sign with
			Name
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

# [C] CAESAREAN SECTIONS OBSERVED/ASSISTED

Sl. No.	DIAGNOSIS	0	A	Date	Staff Sign with Name
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

O-Observed

A-Assisted

# [D] Procedures Observed/ done

		Staff Sign with Name and date					
Sl. No.	Procedures	1-O/D	2-O/D	3-O/D			
1	Assessment of cervical dilatation						
2	Pelvic assessment						
3	Artificial Rupture of Membranes						
4	Perineal Support						
5	Episiotomy Suturing						
6	CTG monitoring						
7	Forceps / Vaccum application						
8	Catheterization						
9	Partograph						
10	Neonatal Resuscitation						

O-Observed

D-Done

BLDE (Deemed to be University)

SI.	Diagnosis	Date	Staff Sign with name
No.			
1			
2			
3			

[E] Obstetric Emergencies Observed : (Eclampsia, APH, Ectopic pregnancy, PPH etc)

# **EVALUATION:**

[A] Day to day Assessment : /20. test :

[B] Ward Leaving

Remarks by Unit Chief:

Signature of Unit Chief with seal

# **Internee Log Book** OBSTETRICS & GYNAECOLOGY

Procedures/Skills	Observ	ved	Assisted		Done	Done		do	Remarks/comme
						under		ndentl	nts
					Supervisi		у		
					on				
	Date	Ν	Dat	Ν	Date	No	Date	No	
		0	e	0					
Intern must perform or assi	st in					I	1		
A.ANC-Diagnosis of early	pregnanc	сy							
1. UPT									
2. ANC care given									
3. Interpretation of									
USG report									
4. Pelvic assesment									
5. CPD tests									
<b>B.</b> Diagnosis of pathology of	of pregna	ncy r	elated	to:					
1. Abortion									
2. Ectopic pregnancy									
diagnosis									
3. Tumors									
complicating									
pregnancy									
4. Acute abdomen in									
early pregnancy									
5. Hyperemesis									
gravidarum									
C. Detection of high risk p	regnancy	cases	8						
1. Hypertensive									
disorder in									
pregnancy									
2. Antepartum									
hemorrhage									
3. Multiple pregnancy									

4. Hydramnios							
5. Abnormal							
Presentation ar	nd						
FGR							
D. Labour							I
1. Induction of la	bour						
2. ARM							
3. Normal Labour	r i						
4. Partogram							
5. PPH							
6. Retained place	nta						
7. Forceps							
8. Vaccum							
9. Breech delivery	y						
10. LSCS							
E. Postnatal care and	advice						I
1. Purepural seps	is						
2. Mastitis							
3. Breast abcess							
4. Failure of lacta	tion						
F. Evaluation and pre	scription of co	ntracep	tion with	n couns	eling		I
1. OCPs							
2. IUCDs							
3. Injectables							
4. Tubal ligation							
G. Gynaecological exa	mination						L
1. Per speculum							
2. Per vaginal							
3. Per rectum							
4. Papsmear							
H. Medico legal							
examination in							
Gynaecology and							
Obstetrics							
Skills that an Intern sh	ould be able to	perforn	n under s	supervis	sion		1

Dilatation and curettage and									
fractional curettage									
Endometrial biopsy									
Visual Inspection of Cervix									
with Acetic Acid (VIA)									
Pap smear collection									
Intrauterine contraceptive									
device(IUCD) insertion									
Mini-lap-ligation, Lap. TL,									
Hysteroscopy, Laparoscopy									
Urethral catheterization									
Pre and post operative care,									
Consent for surgery									
Suture removal in post -									
operative cases									
Cervical punch biopsy									
An Intern must have observe	d or pref	erably	v assisi	ted at	the foll	lowing	g operatio	ns / pr	ocedures
Major abdominal and									
vaginal surgery cases									
Second trimester medical									
termination of									
pregnancy(MTP)									
procedures e.g., Emcredyl,									
prostaglandin instillations,									
caesarean section									
Others									

# Internship Assessment and Feed Back Form

 Name:
 Student / Intern ID:

Supervisor\_\_\_\_\_Department Specialty\_\_\_\_\_ Unit Dates: to Leaves days

# Assessment by the Supervisor /Mentor

# Scoring may be based on

1	Knowledge
2	Patient Care
3	Procedural care
4	Independent Care
5	Communication Skills
6	Professionalism
7	Lifelong learning
8	System Based Practice

# A: Outstanding, B:Good, C: Average D:Needs Further Training

# **FEED BACK**

Strengths:

\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_

#### Areas of Improvements needed:

\_\_\_\_\_ \_\_\_\_\_ -----

# **Comments:**

\_\_\_\_\_ Student: **Supervisor** /Mentor

Date:

Date:

# **RECOMMENDED BOOKS:**

# **Obstetrics :**

- 1. Mudaliar & Menon, Clinical Obstetrics, Sarala Gopalan, Vanita Jain, 12th edition, University Press.
- 2. Dutta D.C., Text book of Obstetrics 10<sup>th</sup> edition, Jaypee Publication.
- 3. Holland and Brews, Textbook of Obstetrics. 4<sup>th</sup> Edition, B. I. Publication, New Delhi,

# **Reference books:**

- 1. Williams Obstetrics Cunningham, Bloom, Sponge, et al 26th edition, Mc Craw Hill education Publication.
- 2. Fernando Arias Amarnath Bhinde, savaratanum Arulkumaran et al 5<sup>th</sup> edition, Elsevier publication.
- 3. Munrokerr's operative obstetrics, Thomas F, Baskett Andrew, Savratanum Arulkumaran, 13<sup>th</sup> edition, Bailliere Tindall, London.

# **Gynaecology:**

- 1. Shaw's A Text book of Gynaecology, Padubidri VG, Shirish N Daftary, 16<sup>th</sup> edition, Elsevier publication
- 2. Dutta DC, Text book of Gynaecology, 6<sup>nd</sup> edition,

# **Reference books**

- 1. Jeffcoate's Principles of Gynaecology, Pratap kumar, Narendra malhotra, 9th edition, Jaypee publication.
- 2. Williams Gynaecology Hoffman, John, Joseph et al, 4<sup>th</sup> edition, Mc Craw Hill education Publication.
- 3. Shaw's operative Gynaecology, Christopher Hudson, Marcus Setchell, 7<sup>th</sup> edition, Elsevier publication.



# BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA PEDIATRICS CURRICULUM

# Goal:

To enable the undergraduate medical student function as a competent Primary Care Physician and be able to provide essential pediatric care.

# **Objectives:**

The objectives of the teaching of undergraduate students in Pediatrics are to acquire knowledge and appropriate skills for optimally dealing with major health problems of children and to ensure their optimal growth and development

# **Cognitive domain:**

At the end of the course, the student shall be able to:

- a) Describe the normal growth and development during fetal life, neonatal period, childhood and adolescence and outline deviations thereof;
- b) Describe the common pediatrics disorder and emergencies in terms of epidemiology, etiopathogenesis, clinical manifestations, diagnosis, rational therapy and rehabilitation;
- c) State age related requirements of calories, nutrients, fluids, drugs etc. in health and disease;
- d) Describe preventive strategies for common infectious disorders, malnutrition, genetic and metabolic disorders, poisonings, accidents and child abuse;
- e) Outline national programs relating to child health including immunization programs;

# **Psychomotor domain:**

At the end of the course, the student shall be able to:

- a) Take a detailed pediatrics history, conduct an appropriate physical examination of children including neonates, make clinical diagnosis, conduct common bedside investigative procedures, interpret common laboratory investigations and plan and institute therapy;
- b) Take anthropometric measurements, resuscitate newborn infants with bag and mask at birth, prepare oral rehydration solution, perform tuberculin test, administer vaccines available under current national programs, start an intravenous line and provide nasogastric feeding, observe venesection and intraosseous infusion, if possible.
- c) Conduct diagnostic procedures such as lumbar puncture, bone marrow aspiration, pleural tap and ascitic tap; observe liver and kidney biopsy.
- d) Distinguish between normal newborn babies and those requiring special care and institute early care to all new born babies including care of pre-term and low birth weight babies, provide correct guidance and counseling in breast-feeding.
- e) Provide ambulatory care to all sick children, identify indications for specialized/inpatient care and ensure timely referral of those who require hospitalization.

# Integration:

The training in pediatrics should be done in an integrated manner with other Disciplines, such as Anatomy, Physiology, Forensic Medicine, Community Medicine, Obstetrics and Physical Medicine, curative and rehabilitative services for care of children both in the community and at hospital as part of a team.

# **Course contents:**

# Vital Statistics:

- Definition and overview of Pediatrics with special reference to age-related disorders. Population structure, pattern of morbidity and mortality in children.
- Maternal, perinatal, neonatal, infant and preschool mortality rates. Definition, causes, present status and measures for attainment of goals.
- Current National programs such as ICDS, RCH, Vitamin A prophylaxis, UIP, Pulse polio, AFP, ARI, Diarrhea control programs etc., IMNCI/ FIMNCI, Other National Programs as part of National Health Mission.

# Growth and Development

- Normal growth from conception to maturity's
- Anthropometry measurement and interpretation of weight, length/height, head circumference, midarm circumference. Use of weighing machines, infant meter, calipers, orchid meter.
- Interpretation of Growth Charts: Road to Health card and percentile growth curves (WHO/NCHS).
- Abnormal growth patterns failure to thrive, short stature.
- Growth pattern of different organ systems such as lymphoid, brain and sex organs.
- Normal pattern of teeth eruption.
- Principles of normal development ·
- Important milestones in infancy and early childhood in the areas of Gross Motor, Fine Motor,
- Language and Personal–Social development. 3-4 milestones in each of the developmental fields, age of normal appearance and the upper age of normal psychological and behavioral problems.
- Measurement and interpretation of sitting height, US: LS ratio and arm span.
- Age-independent anthropometric measurement-principles and application.

# Nutrition:

- Normal requirements of protein, carbohydrates, fats, minerals and vitamins for newborn, children and pregnant and lactating mother. Common food sources.
- Breastfeeding, physiology and lactation, composition of breast milk, Colostrum, Initiation and Technique of feeding. Exclusive breast milk. Hazards and demerits of

pre-lacteal feed, top milk and bottle-feeding. Feeding of LBW babies. Infant feeding/weaning foods, method of weaning.

- Assessment of nutritional status of a child based on history and physical examination.
- Protein energy malnutrition-Definition, classification according to IAP/Welcome Trust, acute versus chronic malnutrition. Clinical features of Marasmus & kwashiorkor. Causes and management of PEM including that of complications planning a diet for PEM.
- Vitamins-Recognition of vitamin deficiencies (A, D, K, C, B complex). Etiopathogenesis, clinical feature, biochemical and radiological findings, differential diagnosis an management of nutritional rickets& scurvy. Hypervitaminosis A and D.
- Characteristics of transitional and mature milk (foremilk & hind milk). Prevention and management of lactation failure and feeding problems.
- Definition, causes and management of obesity.

# Immunization:

- National Immunization Program.
- Principles of Immunization. Vaccine preservation and cold-chain.
- Types, contents, efficacy storage, dose, site, route, contra-indications and adverse reactions of vaccines BCG, DPT, OPV, Measles, MMR and Typhoid: Rationale and methodology of Pulse Polio Immunization.
- Investigation and reporting of vaccine preventable diseases. AFP (Acute Flaccid Paralysis) surveillance.
- Special vaccines like Hepatitis B, H influenza B, Pneumococcal, Hepatitis A, Chicken pox, Meningococcal, and Rabies.

# Infectious diseases:

• Epidemiology, basic pathology, natural history, symptoms, signs, complications, investigations, differential diagnosis, management and prevention of common bacterial, viral and parasitic infections in the region, with special reference to vaccine-preventable disease: Diarrhea, LRTI, Tuberculosis, Poliomyelitis, Meningitis, Diphtheria, Whooping cough, Tetanus including neonatal tetanus, Measles, Mumps, Rubella, Typhoid, Viral Hepatitis, Cholera, Chickenpox, Giardiasis, Amoebiasis, Intestinal helminthiasis, Malaria, Dengue fever, AIDS. Kala-Azar, Leprosy, Chlamydia infection.

# Hematology:

- Causes of anemia in childhood. Classification based on etiology and morphology.
- Epidemiology, recognition, diagnosis, management and prevention of nutritional anemia-iron deficiency, megaloblastic.
- Clinical approach to a child with anemia with lymphadenopathy and/or hepato-splenomegaly.
- Epidemiology, clinical features, investigations and management of Thalassemia.

- Approach to a bleeding child.
- Diagnosis of acute lymphoblastic leukemia and principles of treatment.
- Clinical features and management of hemophilia, ITP.
- Diagnosis and principles of management of lymphomas.
- Types, clinical features and management of acute hemolytic anemia.
- Non-thrombocytopenic purpura (Henoch-Schonely purpura)

# **Respiratory System:**

- Clinical approach to a child with cyanosis, respiratory distress, wheezing. Significance of recession, retraction.
- Etiopathogenesis, clinical features, complications, investigations, differential diagnosis and management of acute upper respiratory infections, pneumonia with emphasis on bronchopneumonia, bronchiolitis, bronchitis. Acute and chronic otitis media.
- Etiopathogenesis, clinical features, diagnosis, classification and management of bronchial asthma. Treatment of acute severe asthma.
- Pulmonary tuberculosis-tuberculous infection versus tuberculous disease, difference between primary and post-primary tuberculosis. Etiopathogenesis, diagnostic criteria in children versus adults. Diagnostic aids-technique and interpretation of Mantoux test and BCG test. Radiological patterns, Chemoprophylaxis and treatment.
- Diagnosis and management of foreign body aspiration. Differential diagnosis of stridor.
- Pathogenesis, clinical features and management of pneumothorax, pleural effusion and empyema.
- Multidrug resistant tuberculosis, Bronchiectasis, pulmonary cysts

# Gastro intestinal tract:

- Clinical approach to a child with jaundice, vomiting, abdominal pain, upper and lower GI bleeding,
- Hepato-splenomegaly.
- Acute diarrheal disease-Etiopathogenesis, Clinical differentiation of watery and invasive diarrhea,
- Complications of diarrheal illness. Assessment f dehydration, treatment at home and in hospital.
- Fluid and electrolyte management. Oral rehydration, composition of ORS.
- Persistent and chronic diarrhea
- Clinical features and management of acute viral hepatitis and acute liver failure, causes & diagnosis of Chronic Liver Disease.
- Neonatal cholestasis, portal hypertension
- Common causes of constipation.
- Abdominal tuberculosis.

- Causes, clinical features and management of Portal hypertension, Reye's syndrome, Celiac disease.
- Drug induced hepatitis

# Central nervous system:

- Evaluation of milestones and developmental age
- Localization of neurological deficit
- Clinical approach to a child with coma, mental retardation
- Common causes and approach to convulsion
- Clinical diagnosis, investigations and treatment of acute pyogenic meningitis, encephalitis &
- Tubercular Meningitis, Cerebral Malaria
- Seizure Disorder-Causes and types of convulsions at different ages. Diagnosis categorization & Management of Epilepsy (Broad outline). Febrile convulsions-definition, types Management of Seizures and status epilepticus.
- Causes, diagnosis and management of cerebral palsy.
- Acute flaccid paralysis Differentiation between Polio and Guillain Barre syndrome.
- Microcephaly, Hydrocephalus, chorea
- Counseling parents for inherited neurological diseases
- Infantile tremor syndrome, infantile hemiplegia.

# Cardiovascular system:

- Clinical features, diagnosis, investigation, treatment and prevention of acute rheumatic fever.
- Common forms of rheumatic heart disease in childhood. Differentiation between rheumatic and Rheumatoid arthritis.
- Recognition of congenital acyanotic and cyanotic heart disease. Hemodynamics, clinical features and Management of VSD, PDA, ASD and Fallot's tetralogy (Cyanotic spells).
- Recognition of congestive cardiac failure in children.
- Hypertension in children-recognition and referral.
- Diagnosis and management of bacterial endocarditis, pericardial effusion, myocarditis.

# **Genito-urinary system:**

- Basic etiopathogenesis, clinical features, diagnosis, complications and management of acute Post streptococcal glomerulo-nephritis and nephrotic syndrome.
- Etiology, clinical feature, diagnosis and management of urinary tract infection acute and recurrent.
- Etiology, diagnosis and principles of management of acute failure.
- Causes and diagnosis of obstructive uropathy in children.

- Diagnosis and principles of management of chronic renal failure.
- Causes and diagnosis of hematuria.
- Renal and bladder stones
- Hemolytic-uremic syndrome

# **Endocrinology:**

- Etiology clinical features & diagnosis of diabetes and hypothyroidism, hyperthyroidism and goiter in children.
- Delayed and precocious puberty

# Neonatology:

- Definition live birth, neonatal period, classification according to weight and gestation, mortality rates.
- Delivery room management including neonatal resuscitation and temperature control
- Etiology, clinical features, principles of management and prevention of birth asphyxia.
- Birth injuries causes and their recognition.
- Care of the normal newborn in the first week of life. Normal variations and clinical signs in the Neonate.
- Breast feeding-physiology and its clinical management
- Identification of congenital anomalies at birth with special reference to anorectal anomalies,
- Tracheoesophageal fistula, diaphragmatic hernias, neural tube defects.
- Neonatal Jaundice: causes, diagnosis and principles of management.
- Neonatal infection- etiology, diagnosis, principles of management. Superficial infections, sepsis.
- Low birth weight babies-causes of prematurity and small-for-date baby, clinical features and Differentiation. Principles of feeding and temperature regulation. Problems of low birth weight Babies.
- Identification of sick newborn (i.e. detection of abnormal signs cyanosis, jaundice, respiratory distress, bleeding, seizures, refusal to feed, abdominal distension, failure to pass meconium and Urine).
- Recognition and management of specific neonatal problems-hypoglycemia, hypocalcemia, anemia, seizures, necrotizing enterocolitis, hemorrhage
- Common intra-uterine infections
- Transportation of a sick neonate.

# **Pediatrics emergencies:**

- Status epilepticus
- Status asthmatics/Acute Severe Asthma
- Shock and anaphylaxis. Burns Hypertensive emergencies.

- Gastrointestinal bleed.
- Comatose child
- Congestive cardiac failure ·
- Acute renal failure

#### Fluid-electrolyte:

- Principles of fluid and electrolyte therapy in children
- Pathophysiology of acid-base imbalance and principle of management

# **Genetics:**

- Principles of inheritance and diagnosis of genetic disorders
- Down's syndrome and common genetic disorders

# **Behavioral problems:**

• Breath holding spells, nocturnal enuresis, temper tantrums, pica

# **Pediatrics surgical problems:**

• Diagnosis and timing of surgery of Cleft lip/palate, hypospadias, undescended testis, tracheoesophageal fistula, hydrocephalus, CTEV, Umbilical and inguinal hernia, malformations, hypertrophic pyloric stenosis.

# **Therapeutics:**

Pediatric doses, drug combinations, drug interactions, age specific choice of antibiotics.

# **Teaching and learning activities:**

Teaching in the department will include didactic/interactive lectures and practical training.

# **Didactic/ Interactive/Integrated Lectures Topics:**

- 1. Introduction to child health and age related influences on child health
- 2. Growth: Principles, Normal pattern, clinical indices and use of growth charts
- 3. Growth: Abnormal, etiology and approach to management
- 4. Development: Principles and normal milestones
- 5. Abnormal development: etiology and management
- 6. Protein energy malnutrition: Etiology, classification, clinical features, management
- 7. Clinical aspects of fluid and electrolyte balance in children
- 8. Common vaccines: doses, schedule, contraindications and side effects
- 9. Approach to a child with shock
- 10. Approach to a child with acute fever
- 11. Deficiency disorders of vitamins and micro-nutrients
- 12. Approach to a child with acute diarrhea, dehydration and ORS

- 13. Persistent diarrhea: etiology, clinical features and management. Dietary therapy in chronic diarrhea
- 14. Approach to management of common abdominal symptoms -pain, vomiting, constipation, rectal bleeding etc.
- 15. Approach to a child with upper respiratory tract infection (LTB, epiglottitis, otitis media, cough and cold).
- 16. Approach to a child with lower respiratory infection (pneumonia, bronchiolitis).
- 17. Approach to a child with wheezing including asthma
- 18. Introduction to newborn care, and classification of neonates.
- 19. Care of normal newborn
- 20. Breast feeding, weaning diets and lactation failure
- 21. Approach to a newborn with respiratory distress
- 22. Approach to jaundice in the newborn
- 23. Infections in the newborn
- 24. Perinatal asphyxia: etiology, clinical features and management
- 25. Approach to a child with bleeding & coagulation disorders
- 26. Approach to a child with malignancy
- 27. Approach to a child with congestive cardiac failure
- 28. Rheumatic fever: clinical features, management and prophylaxis
- 29. Approach to a child with congenital heart disease
- 30. Approach to a child with urinary tract infection including recurrent UTI
- 31. Approach to a child in coma
- 32. Approach to a child with acute flaccid paralysis
- 33. Neonatal seizures and febrile convulsions diagnosis and management
- 34. Approach to common genetic disorders including Downs Syndrome
- 35. Short stature, hypothyroidism: etiology and management
- 36. Adolescent growth, sexual maturation and disorders of Puberty.

#### Assessment:

#### Formative & internal assessment:

Formative assessment is an assessment conducted during the instruction with the primary purpose of providing feedback for improving learning. The feedback is central to formative assessment and is linked to deep learning, seeking to explore the educational literature and its pedagogical lessons for healthcare educational practice. An end of posting, clinical assessment will be conducted for each clinical posting. Prior to University examinations, departments will conduct additional tests as and when required.

#### **Components of IA:**

- i) Theory IA will include: Written tests, should have essay questions, short notes and creative writing experiences.
- ii) Practical / Clinical IA will include: practical / clinical tests, Objective Structured Clinical Examination (OSCE) / Objective Structured Practical Examination (OSPE),

Directly Observed Procedural Skills (DOPS), Mini Clinical Evaluation Exercise (mini-CEX), records maintenance and attitudinal assessment.

- iii) Assessment of Log-book. Log book will record all activities like seminar, symposia, quizzes and other academic activities. Achievement of certifiable competencies should also be recorded in logbooks.
- iv) It should be assessed regularly and submitted to the department.

**Feedback in IA:** Feedback will be provided to students throughout the course so that they are aware of their performance and remedial action can be initiated well in time. The feedbacks need to be structured and the faculty and students must be sensitized to giving and receiving feedback. The results of IA will be displayed on notice board within two weeks of the test and an opportunity provided to the students to discuss the results and get feedback on making their performance better.

Sl. no	Particular	Marks
01	Ward Leaving Exams(Practical)	20
02	2nd IA Theory Test	75
03	Prelims theory	100
04	Prelims Practical	100

Internal Examination Format for 4th professional year:

Internal Assessment Calculation	Marks
Average of two IA Exams and Prelims Exams is taken	
to calculate the internal assessment marks	
Theory Internal Examination marks reduced to	30 marks
Practical Internal Examination marks reduced to	20 marks

Theory Examination Pattern						
Sl. no	Particular	Marks				
01	MCQ (1x20)	20				
02	Long Answer question (2x10)	20				
03	Short Essay Question (6x5)	30				
04	Short answer question (10x3)	30				

	Practical Examination Pattern								
Sl. no		Time for case taking	Time for assessment	Total marks					
01	Pediatric Case	20 Minutes	10 Minutes	40					
02	Neonatal Case	20 Minutes	10 Minutes	40					
	·	Table Viva							
03	4 Components	Nutrition	(05 minutes for	20					
		Vaccines and Drugs	assessment)						
		Instruments- procedure							
		X-rays							
	·		Total Marks	100					

# **Recommended Reading Books:**

# **Textbooks for Pediatrics**

- 1. "Essentials of Pediatrics" by OP Ghai, Vinod K Paul and Piyush Gupta (latest edition)
- 2. "Care of the Newborn" by Meharban Singh (latest edition)

# **Reference Books**

- 1. "Nelson Textbook of Pediatrics" by Richard E. Behrman, Robert M. Kliegman, Waldo E. Nelson and Victor C. Vaughan (latest edition)
- 2. "Rudolph's Pediatrics" by Abraham M. Rudolph, Julien IE Hoffman, Colin D. Rudolph and Paul Sagan (latest edition)

# **Clinical Methods**

- 1. "Hutchison's Clinical Methods" by M Swash (latest edition)
- 2. "Pediatrics Clinical Methods" by Meharban Singh (latest edition)
- 3. Clinical methods by Piyush Gupta. (latest edition)

# Topics

Theory Classes	(1hr each)
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#### **20 Hours**

Sl.no.	Торіс	Competencies
1.	Describe the etio-pathogensis, clinical features, management of Hypothyroidism in children.	PE33.1
2.	Discuss the etiopathogensis, clinical types, presentations, complication and management of Diabetes mellitus in children.	PE33.4
3.	Discuss the aetiology, clinical features and management of neonatal sepsis.	PE20.16
4.	Discuss the aetiology, clinical features and management of neonatal hyperbilirubinemia and prolong cholesteric jaundice.	PE 20.19
5.	Discuss the aetiology, clinical features and manage met of neonatal seizures.	PE 20.15

6.	Discuss the clinical characteristics, complication and management of law hirth weight (Protorm and small for gostation)	PE 20.11
7.	low birth weight (Preterm and small for gestation). Discuss the aetiology, Clinical features and management of	PE20.10
8.	hemorrhagic disease of newborn. Discuss the aetiology, Clinical features and management of respiratory distress in newborn including meconium aspiration and transient	PE20.8
9.	tachypnea of newborn. Discuss the etio pathogenesis, diagnosis, clinical features management and prevention of LRTI.	PE28.18
10.	Discuss the hemodynamic changes, clinical presentation, complication and management of cyanotic heart diseases- Fallot physiology.	PE23.2
11.	Discuss the etiopathogenesis, clinical features complications, management and prevention of meningitis in children. Distinguish bacterial, viral and tuberculosis meningitis.	PE30.1, PE30.2
12.	Discuss the etipathogensis, classification, clinical features complications and management of microcephaly and hydrocephalus in children.	PE30.3, PE30.4.
13.	Discuss the etiopathogensis, clinical features and management of mental retardation.	PE 30.10
14.	Discuss the etiopathogensis, clinical features and management of cerebral palsy	PE30.11.
15.	Define status epilepticus. Discuss the clinical presentation and management.	PE30.8, PE 30.9
16.	Discuss the approach and referral criteria to a chid with hematuria.	PE 21.4
17.	Discuss the clinical features and complications of fluid and electrolyte imbalance and outline the management.	PE 15.2
18.	Discuss the etiopathogensis, clinical features and management of Duchene Muscular dystrophy.	PE 15.2
19.	Enumerate the etiopathogensis, clinical features, complications and management of acute post streptococcal glomerulonephritis in children.	PE21.2.
20.	Discuss the approach and referral criteria to a child with proteinuria.	PE 21.3.
21	Describe the etio-pathogensis, clinical features, management of Hypothyroidism in children.	PE33.1
22	Discuss the etiopathogensis, clinical types, presentations, complication and management of Diabetes mellitus in children.	PE33.4
23	Discuss the aetiology, clinical features and management of neonatal sepsis.	PE20.16
24	Discuss the aetiology, clinical features and management of neonatal hyperbilirubinemia and prolong cholesteric jaundice.	PE 20.19
25	Discuss the aetiology, clinical features and manage met of neonatal seizures.	PE 20.15

26	Discuss the clinical characteristics, complication and management of low birth weight (Preterm and small for gestation).	PE 20.11
27	Discuss the aetiology, Clinical features and management of hemorrhagic disease of newborn.	PE20.10
28	Discuss the aetiology, Clinical features and management of respiratory distress in newborn including meconium aspiration and transient tachypnea of newborn.	PE20.8
29	Discuss the etiopathogenesis, diagnosis, clinical features management and prevention of LRTI.	PE28.18
30	Discuss the hemodynamic changes, clinical presentation, complication and management of cyanotic heart diseases- Fallot physiology.	PE23.2
31	Discuss the etiopathogenesis, clinical features complications, management and prevention of meningitis in children. Distinguish bacterial, viral and tuberculosis meningitis.	PE30.1, PE30.2
32	Discuss the etipathogensis, classification, clinical features complications and management of microcephaly and hydrocephalus in children.	PE30.3, PE30.4.
33	Discuss the etiopathogensis, clinical features and management of mental retardation.	PE 30.10
34	Discuss the etiopathogensis, clinical features and management of cerebral palsy	PE30.11.
35	Define status epilepticus. Discuss the clinical presentation and management.	PE30.8, PE 30.9
36	Discuss the approach and referral criteria to a chid with hematuria.	PE 21.4
37	Discuss the clinical features and complications of fluid and electrolyte imbalance and outline the management.	PE 15.2

# Self-Directed Learning (1 Hrs Each)

# **05 Hours**

• Tribal health, Essential Medicine (CM 19.1-3), Emerging & re-emerging infections (CM 20.1), Hospital acquired infections, New Public health threats (CM 20.1)

# Small Group Teaching/ Tutorials/ Integrated Learning 35 Hours

- Common Neonatal Nomenclatures, describe the characteristics of a normal term neonates and high risk neonates. PE20.1
- Discuss the aetiology, clinical features and management of birth injuries. PE 20.9
- Discuss the etiology, clinical features and management of birth asphyxia. PE20.7
- Explain the care of a normal neonate. PE20.2
- Discuss the temperature regulation in neonates, clinical features and management of neonatal hypothermia. PE20.12
- Discuss the etiopathogensis, clinical features and management of acute Otitis media. PE28.4

- Discuss the etiology, clinical features and management of stridor in children. PE28.7.
- Discuss the etio pathogenesis, clinical features and management of acute larngo trachea bronchitis. PE28.6
- Discuss the etiopathogensis, clinical features, management and prevention of poliomyelitis in children PE30.13
- Discuss the etiopathogensis, classification, clinical features and management of microcephaly in children. PE30.4
- Discuss the approach to and management of child with headache. PE 30.16
- Discuss the common types, clinical presentations and management of poisoning in children. PE27.8
- Discuss the etiopathogensis, clinical approach and management of unconscious child.
- Enumerate the etiopathogensis, clinical features, management and complication of acute renal failure in children. PE 21.5
- Define precocious puberty and delayed Puberty. PE33.8
- Discuss the clinical features, complications, diagnosis and management of acute rheumatic fever in children. PE 23.4
- Discuss the etiopathogensis, clinical features, management of cardiac failure in children PE23.3.

# Horizontal integrated teaching:

Sl. No.	Торіс	Collaborating
		Departments
01	Discuss the aetiology, clinical features and management of birth injuries. PE 20.9	OBG
02	Enumerate the etiopathogensis, clinical features, management and complication of acute renal failure in children. PE 21.5	Medicine
03	Discuss the clinical features, complications, diagnosis and management of acute rheumatic fever in children. PE 23.4	Medicine
04	Discuss the etiopathogensis, clinical features, management of cardiac failure in children PE23.3.	Medicine

# Vertical integration topics:

Sl. No.	Торіс	Collaborating Departments
01	Discuss the etiopathogensis, clinical features and management of	ENT
	acute Otitis media. PE28.4	
02	Discuss the etiopathogensis, clinical features, management and	PSM
	prevention of poliomyelitis in children PE30.13	
03	Discuss the common types, clinical presentations and	FMT
	management of poisoning in children. PE27.8	

# **AETCOM MODULE:**

# **10 Hours**

# Learning Modules for Professional Year IV

# Module 4.7: Case Studies in ethics and patient autonomy

# **Background:**

This module discusses ethical issues in care of children (also see module 2.5)

# **Competency addressed:**

The student should be able to:	Level
Identify conflicts of interest in patient care and professional	SH
relationships and describe the correct response to these conflicts.	

# Learning Experience:

Year of Study: Professional Year – 4		Hours: 05
i) Introduction of case	-	01 Hour
ii) Self-directed leaning	-	02 Hours
iii) Anchoring Lecture	-	01 Hour
iv) Discussion and closure of case	-	01 Hour

# Case: The "Cruel" Parents

# **Point for discussion:**

- 1. Who has the right to decide for children?
- 2. Can Parents refuse treatment even in life threatening situations?
- 3. What if there is a conflict?

# Assessment:

- 1) **Formative:** The student may be assessed based on their active participation in the sessions.
- 2) Summative: Short questions on parental consent.

# Module 4.8: Dealing with Death

# **Background:**

Thanatology is a branch of science that deals with death. Death is an event that any medical student will inevitably face during the course of their professional career. Dealing with death empathetically and at the same time not being overwhelmed by it is an important coping skill for doctors.

# **Competency addressed:**

The student should be able to:	Level
Identify conflicts of interest in patient care and professional relationships	SH
and describe the correct response to these conflicts.	
Demonstrate empathy to patient and family with a terminal illness in a	SH
simulated environment.	

# Learning Experience:

# Year of Study: Professional Year – 4 Hours: 05

i) Introduction of case	-	01 Hour
ii) Self-directed leaning	-	02 Hours
iii) Anchoring Lecture	-	01 Hour
iv) Discussion and closure of case	-	01 Hour

# **Case: The Empty Bed**

# **Point for discussion:**

- 1) How should doctors with the emotions of patients and family facing death?
- 2) What does the patient experience when he/she is dying? Can physicians make the proce4ss of deah comfortable?
- 3) What are the emotions faced by doctors when confronting death in patients? Is death a defeat for the doctor? Should the doctor be emotionally attached from a dying patient?
- 4) What are cultural aspects of dying?

# Alternate case: I have decided to die

# Assessment:

- 1. **Formative:** Participation in sessions may be used as part of formative assessment. Submitted narrative on the socio cultural aspects of death may be used as assessment.
- 2. Summative: Short questions on parental consent.

# **Teaching learning methods:**

- 1. Large group Lectures (Interactive)
- 2. Small group Practical's/ Demonstrations
- 3. Self-directed learning
- 4. OSCE
- 5. AETCOM Module
- 6. Innovative Methods (Quiz, Role Play, Student Seminars, DOPS Sessions (8 hours),

# **Teaching hours:**

Professional year	Lecture	Small Group	Self-Directed	AETCOM	Total	<b>Clinical Postings</b>
		Teaching	Learning			
Fourth	20	35	05	10	70	4 Weeks

# BLDE (Deemed to be University)

# **MODEL QUESTION PAPER**

# (PROFESSIONAL YEAR IV)

#### PAEDIATRICS

#### **Multiple Choice Questions**

#### **Instructions:**

- 1. All questions are compulsory
- 2. Your answer should be specific to the question asked
- 3. Draw neat labeled diagrams wherever necessary
- 4. Each answer should be written on new page only
- 5. Write correct question number on left side of the margin.

#### **Total Marks: 80**

# 2 x 10 = 20 Marks

 $6 \times 5 = 30$  Marks

- 1. List Viral Exanthametous Fevers in Children. Add Brief note on Clinical Features and Management of measles.
- 2. Nephrotic syndrome- Definition, Discuss Diagnosis and management.

#### **Short Essay**

Long Essays

- 1. Diagnostic Criteria for Kawasaki Disease.
- 2. Treatment for Thalassemia major.
- 3. Down syndrome.
- 4. Micro Nutrients.
- 5. Hemodynamics in ASD.
- 6. Kangaroo Mother care

#### Short Answers

- 1. SAM Criteria.
- 2. Mantoux test.
- 3. X-ray findings in Rickets
- 4. Weight gain Pattern till 2 years
- 5. Colostrum
- 6. Management of Breath holding spells
- 7. APGAR Score
- 8. Acute Flaceid Paralysis. Enumerate six Important causes
- 9. CSF fluid analysis
- 10. BCG vaccine.

# 10 × 3 = 30 Marks

# 20 Marks

# List of Abbreviations

Α	Attitude
AETCOM	Attitude Ethics and Communication
Anat	Anatomy
Biochem	Biochemistry
Cardio	Cardiology
Com Med	Community Medicine
Derm	Dermatology
DOPS	Directly Observed Procedural Skills
ENT	ENT
Forensic	Forensic Medicine
Gastro	Gastroenterology
К	Knows
КН	Know How
S	Shows
С	Communication
Med	Gen Medicine
Micro	Microbiology
N	No
OBG	Obstetrics & Gynecology
Ophthal	Ophthalmology
OSCE	Objective Structured Clinical Examination
OSPE	Objective Structured Practical Examination
Psych	Psychiatry
PMR	Physical Medicine Rehabilitation
Path	Pathology
Physio	Physiology
Pharm	Pharmacology
SAQ	Short Answer Question
SGD	Small Group Discussion
Surg	Gen Surgery
RadioD	Radio diagnosis
Resp Med	Respiratory Medicine
Y	Yes

# DEPARTMENT OF PEDIATRICS UNDERGRADUATE LOGBOOK

Name	•••••
Year of Admission	Batch Roll No
Reg. No. (Univ)	



B.L.D.E. (DEEMED TO BE UNIVERSITY)

(Declared as Deemed to be University u/s 3 of the UGC Act,1956) The Constituent College



SHRI. B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE VIJAYAPUR,

## DEPARTMENT OF PEDIATRICS UNDERGRADUATE LOGBOOK



Name	
Year of Admission	
Batch Roll No Reg. No. (Univ)	
Permanent Address	
Local Address	
E-mail ID	

This document includes the minimum basic requirements as per extant competencies/curriculum/regulations on Graduate Medical Education, 2018.

The user departments are free to add other competencies/skills/activities for documentation to improve the pedagogic utility of this logbook. An electronic version will make documentation and retrieval much easy.

All competencies listed are copyright of MCI/NMC.

### LOGBOOK CERTIFICATE

This is to certify that the student Mr/Ms
admitted at
in the yearand
University Reg. No has satisfactorily completed / has not
completed all assignments /requirements mentioned in this logbook for final
year MBBS course in the subject of Pediatrics.

The student is/is not eligible to appear for the summative (University) assessment.

Signature of Faculty Name and Designation Signature and Seal Head of Pediatric Department

Signature and Seal Principal/Dean of the College

## INDEX

Sl. No.	Contents	Page No
I.	Clinical Case Presentations	
II.	Competencies	
	A. Requiring Certification	
	B. Requiring Documentation	
III.	Skill Learning Sessions	
	A. Certifiable Procedural Skills	
	B. Other Skills	
IV.	Affective Competencies Requiring Documentation	
V.	Clinic/ Field Visits	
VI.	Participation in Departmental Activities	
VII.	Self-Directed Learning (SDL) Sessions	
VIII.	Integrated Learning Sessions	

#### **Glossary\***

#### Attempt at Competency

F: First or onlyR: RepeatRe: Remedial

#### Rating\*\*

B: Below expectationsM: Meets expectationE: Exceeds Expectation

#### **Decision of Faculty**

C: Completed R: Repeat Re: Remedial

\*The terms used are expanded in NMC Logbook available at

https://www.nmc.org.in/MCIRest/open/getDocument?path=/Documents/Public/Portal/LatestNews /Logbook%20Guidelines 17.01.2020.pdf. This may also be referred to in case any clarification is required. Sufficient flexibility has been provided to the colleges in designing the logbook, as long as the basic guidelines are adhered to.

\*\*A numerical score can also be used



#### BLDE (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA PEDIATRICS LOG BOOK

#### **GENERAL INSTRUCTIONS**

- **1.** This logbook is a record of academic and other activities of the student in the Department of Pediatrics.
- **2.** Entries in the logbook reflect the activities undertaken by the student and certified by the faculty.
- 3. The student would be responsible for maintaining his/her logbook regularly.
- **4.** The student is responsible for getting the logbook entries verified by concerned faculty regularly.
- **5.** The logbook should be verified by the Head of Department before forwarding the application of the student for the University Examination.
- 6. The reflections should demonstrate the learning that has taken place. Don't simply repeat the activities performed. Emphasize the learning experience, what you learnt and how it is going to be useful in future. At times, mistakes also provide great learning opportunities. Reflections provide a useful opportunity to document and assess learning for many competencies where there is no formal assessment. A deliberate effort should be made to teach the students to write academically useful reflections. Similarly, the teachers should acquire the skills for assessing reflections.
- 7. Colleges may consider using an electronic version of this logbook to facilitate documentation and retrieval of the work, if required.

Rotation	Phase	Duration (Weeks)	From	То	Faculty Signature
1st	Phase II				
2nd	Phase III Part I				
3rd	Phase III Part II				

## **Clinical Posting**

## I. CLINICAL CASE PRESENTATIONS

Summary of Clinical Case Presentations\* (\*Departments may create/continue with a case record book for documentation of cases)

Sl. No.	Date	Patient Name& ID	Diagnosis	Case Presented/ Attended Write P/A	Teacher's Signature

#### Phase II:

Phase	III	(Part	<b>I):</b>
-------	-----	-------	------------

Teacher's Signature	Case Presented/ Attended Write P/A	Diagnosis	Patient Name& ID	Date	Sl. No.

Sl. No.	Date	Patient Name& ID	Diagnosis	Case Presented/ Attended Write P/A	Teacher's Signature

Sl. No.	Date	Patient Name& ID	Diagnosis	Case Presented/ Attended Write P/A	Teacher's Signature

Phase III (Part II):

BLDE (Deemed to be University)

			1		a to be University)
Sl. No.	Date	Patient Name& ID	Diagnosis	Case Presented/ Attended Write P/A	Teacher's Signature

(Students should preferably reflect on cases which they themselves have presented)

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :				
Student Presenter Date							
What happe	What happened?						
So what?							
What next?							
Faculty sign	ature		Date :				

Т

SI. No	Patient Name	Age/Sex	UHID No :
	Diagnosis:		
Student Pres	senter		Date
What happe	med?		
So what?			
What next?			
Faculty sign	ature		Date :

SI. No	Patient Name	Age/Sex	UHID No :
	Diagnosis:		
Student Pres	senter		Date
What happe	med?		
So what?			
What next?			
Faculty sign	ature		Date :

SI. No	Patient Name	Age/Sex	UHID No :
	Diagnosis:		
Student Pres	senter		Date
What happe	med?		
So what?			
What next?			
Faculty sign	ature		Date :

SI. No	Patient Name	Age/Sex	UHID No :
	Diagnosis:		
Student Pres	senter		Date
What happe	med?		
So what?			
What next?			
Faculty sign	ature		Date :

SI.	Patient Name	Age/Sex	UHID No :
No	Diagnosis:		
Student Pre	senter		Date
What happe	ened?		
So what?			
What next?			
Faculty sign	nature		Date :

Name.....

Year of Admission.....

Batch Roll No..... Reg. No. (Univ).....

### **II. COMPETENCIES**

## A. COMPETENCIES REQUIRING CERTIFICATION\*

#### **Summary of Certifiable competencies**

Number	Competency Details	Number required to Certify P	Date completed	Reference Page no.
PE 1.4	Perform anthropometric measurements, document in growth charts and interpret	3		
PE 1.7	Perform developmental assessment and interpret	3		
PE 7.5	Observe the correct technique of breast feeding and distinguish right from wrong techniques	3		
PE 11.5	Calculate BMI, document in BMI chart and interpret	3		
PE 19.6	Assess patient for fitness for immunization and prescribe an age-appropriate immunization schedule	5		
PE 24.15	Perform NG tube insertion in a manikin	2		
PE 24.16	Perform IV cannulation in a model	2		
PE 24.17	Perform interosseous insertion model	2		
PE 27.15	Assess airway and breathing: recognize signs of severe respiratory distress. Check for cyanosis, severe chest indrawing, grunting	3		

			 ,,
PE 27.16	Assess airway and breathing.	3	
	Demonstrate themethod of positioning		
	of an infant & child to open airway in a		
	simulated environment		
PE 27.17	Assess airway and breathing:	3	
	administeroxygen using correct		
	technique and appropriate flow rate		
PE 27.18	Assess airway and breathing: perform	3	
	assisted ventilation by bag and mask in a		
	simulated environment		
PE 27.19	Check for signs of shock i.e. pulse,	3	
	bloodpressure, CRT		
PE 27.20	Secure an IV access in a	3	
	simulatedenvironment		
PE 27.21	Choose the type of fluid and calculate the	3	
	fluidrequirement in shock		
PE 27.22	Assess level of consciousness & provide	3	
	emergency treatment to a child with		
	convulsions/coma		
	Position an unconscious child Position		
	a child with suspected trauma		
	Administer IV/per rectal Diazepam for a		
	convulsing child in a simulated		
	environment		
PE 27.23	Assess for signs of severe dehydration	3	
PE 27.28	Provide BLS for children in manikin	3	
PE 33.6	Perform and interpret urine dip stick for sugar	3	
PE 33.11	Identify deviations in growth and	2	
	planappropriate referral		
PE 34.6	Identify a BCG scar	3	
PE 34.7	Interpret a Mantoux test	3	
PE 34.11	Perform AFB staining	3	

#### Student's Signature

Signature of Faculty Name and Designation

\*This page can be kept as a perforated sheet, which can be torn and put in student file after completion.

#### PE1.4 Perform anthropometric measurements, document in growth charts and interpret

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

Minimum number required to certify-3\*

\*Additional rows have been provided to document repeat or remediation, as the case may be.

\*\*A numerical value may be used.

Only performance is to be documented here. Other details like steps (if required) can be documented in the student record book.

#### PE1.7 Perform developmental assessment and interpret

Minimum number required to certify-5				
Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date
	Competency	Attempt at Competency (B/M/F) **	Attempt at CompetencyRating (B/M/F) **Decision of Faculty	Attempt at CompetencyRating (B/M/F) **Decision of FacultyInitial of Faculty

Minimum number required to certify-3

PE7.5 Observe the correct technique of breast feeding and distinguish right from wrong techniques Minimum number required to certify-3

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE11.5 Calculate BMI, document in BMI chart and interpret

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

PE19.6 Assess patient for fitness for immunization and prescribe an age-appropriate immunization schedule

Minimum number required to certify- 5

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE24.15 Perform NG tube insertion in a manikin

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE24.16 Perform IV cannulation in a model

Minimum number	required to	certify-2
----------------	-------------	-----------

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE24.17 Perform interosseous insertion in a model

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE27.15 Assess airway and breathing: recognize signs of severe respiratory distress. Check for cyanosis, severe chest indrawing, grunting

#### Minimum number required to certify-3

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

## PE27.16 Assess airway and breathing. Demonstrate the method of positioning of an infant & child to open airway in a simulated environment

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

## PE27.17 Assess airway and breathing: administer oxygen using correct technique and appropriate flow rate

Minimum number required to certify-3

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

## **PE27.18** Assess airway and breathing: perform assisted ventilation by Bag and mask in a simulated environment

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE27.19 Check for signs of shock i.e., Pulse, Blood Pressure, CRT

#### Minimum number required to certify- 3

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE27.20 Secure an IV access in a simulated environment

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PF27.21 Choose the type of fluid and calculate the fluid requirement in shock

Minimum number required to certify-3

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE27.22 Assess level of consciousness & provide emergency treatment to a child with convulsions/ coma

- Position an unconscious child
- Position a child with suspected trauma
- Administer IV/per rectal Diazepam for a convulsing child in a simulated environment

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE27.23 Assess for signs of severe dehydration

#### Minimum number required to certify- 3

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE27.28 Provide BLS for children in manikin

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE33.6 Perform and interpret urine dip stick for sugar

#### Minimum number required to certify- 3

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### **PE33.11** Identify deviations in growth and plan appropriate referral

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE34.6 Identify a BCG scar

#### Minimum number required to certify- 3

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE34.7 Interpret a Mantoux test

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### PE34.11 Perform AFB staining

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

SI. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	esenter	 	Date
What happo	ened?		
So what?			
What next?	,		
Faculty sig	nature	 	Date :

SI. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	esenter	 	Date
What happo	ened?		
So what?			
What next?	,		
Faculty sig	nature	 	Date :

SI. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	esenter	 	Date
What happo	ened?		
So what?			
What next?	,		
Faculty sig	nature	 	Date :

SI. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	senter		Date
What happe	ened?		
So what?			
What next?	,		
Faculty sign	nature		Date :

SI. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	senter		Date
What happe	ened?		
So what?			
What next?	,		
Faculty sign	nature		Date :

## **B.** COMPETENCIES REQUIRING DOCUMENTATION\*

\*These can be integrated with the case presentations/ demonstrations/ seminars or may be undertaken as standalone activities.

### **Summary of Competencies requiring Documentation:**

S. No	Competency No.	<b>Competency Detail</b>	Date Completed	Faculty Signature
1.	PE 9.7	Plan an appropriate diet in health and disease		
2.	PE 10.4	Identify children with under nutrition as per IMNCI criteria and plan		
3.	PE 11.3	Assessment of a child with obesity with regard to eliciting history including physical activity, charting and dietary recall.		
4.	PE 12.3	Identify the clinical features of dietary deficiency / excess of Vitamin A		
5.	PE 12.4	Diagnose patients with Vitamin A deficiency, classify and plan management.		
6.	PE 12.8	Identify the clinical features of dietary deficiency of Vitamin D		
7.	PE 12.9	Assess patients with Vitamin D deficiency, diagnose, classify and plan management		
8.	PE 12.17	Identify the clinical features of Vitamin B complex deficiency		
9.	PE 12.18	Diagnose patients with Vitamin B complex deficiency and plan management		
10.	PE 12.21	Identify the clinical features of Vitamin C deficiency		
11.	PE 13.3	Identify the clinical features of dietary deficiency of Iron and make a diagnosis		
12.	PE 16.2	Assess children < 2 months using IMNCI guidelines		
13.	PE 16.3	Assess children > 2 to 5 years using IMNCI guidelines and Stratify Risk.		

14.	PE 18.4	Provide intra-natal care and conduct a normal delivery in a simulated environment.	
15.	PE 18.5	Provide intra-natal care and observe the conduct of a normal delivery	
16.	PE 19.13	Demonstrate the correct administration of different vaccines in a mannequin	
17.	PE 20.6	Explain the follow up care for neonates including breast feeding, temperature maintenance, immunization, importance of growth monitoring and red flags	
18.	PE20.18	Identify and stratify risk in a sick neonate using IMNCI guidelines	
19.	PE 21.9	Identify external markers for kidney disease, like failing to thrive, hypertension, pallor, ichthyoses, anasarca	
20.	PE 21.10	Analyse symptom and interpret the physical findings and arrive at an appropriate provisional/differential diagnosis	
21.	PE 21.12	Interpret report of Plain X Ray of KUB	
22.	PE 21.13	Enumerate the indications for and interpret the written report of ultrasonogram of KUB	
23.	PE 21.14	Recognize common surgical conditions of the abdomen and genitourinary system and enumerate the indications for referral including acute and subacute intestinal obstruction, appendicitis, pancreatitis, perforation, intussusception, phimosis, undescended testis, chordee, hypospadias, torsion testis, hernia hydrocele, vulval synechiae.	
24.	PE 21.15	Discuss and enumerate the referral criteria for children with genitourinary disorder	
25.	PE 23.11	Develop a treatment plan and prescribe appropriate drugs including fluids in cardiac diseases, anti-failure drugs, and inotropic agents.	
26.	PE23.12	Interpret a chest X ray and recognize cardiomegaly	

27.	PE23.13	Choose and Interpret blood reports in cardiac illness	
28.	PE 23.14	Interpret Pediatric ECG	
29.	PE 23.15	Use the ECHO reports in management of cases	
30.	PE 24.11	Apply the IMNCI guidelines in risk stratification of children with diarrheal dehydration and refer.	
31.	PE 24.12	Perform and interpret stool examination including hanging drop	
32.	PE 24.13	Interpret RFT and electrolyte report	
33.	PE 26.10	Demonstrate the technique of liver biopsy & perform liver biopsy in a simulated environment	
34.	PE 27.10	Observe the various methods of administering oxygen	
35.	PE 27.31	Assess child for signs of abuse	
36.	PE 28.15	Stratify risk in children with stridor using IMNCI guidelines	
37.	PE 28.16	Interpret blood tests relevant to upper respiratory problems	
38.	PE 29.15	Perform and interpret peripheral smear	
39.	PE 29.17	Demonstrate performance of bone marrow aspiration in manikin	
40.	PE 30.20	Interpret and explain the findings in a CSF analysis.	
41.	PE 30.21	Enumerate the indication and discuss the limitations of EEG, CT, MRI	
42.	PE 30.22	Interpret the reports of EEG, CT, MRI	
43.	PE 31.11	Observe administration of nebulization	
44.	PE 32.2	Identify the clinical features of Down's Syndrome	
45.	PE 32.3	Interpret normal karyotype & recognize Trisomy 21	

46.	PE 32.7	Identify the clinical features of Turner Syndrome	
47.	PE 32.8	Interpret normal karyotype and recognize the Turner karyotype	
48.	PE 32.12	Identify the clinical features of Klinefelter Syndrome	
49.	PE 32.13	Interpret normal karyotype and recognize the Klinefelter karyotype	
50.	PE 33.10	Recognize precocious and delayed puberty and refer	
51.	PE 34.9	Interpret blood tests in the context of laboratory evidence for tuberculosis	

# **REFLECTIONS: COMPETENCIES REQUIRING DOCUMENTATION**

SI. No	Patient Name	Age/Sex	UHID No :
	Diagnosis:		
Student Pres	senter		Date
What happe	ened?		
So what?			
What next?			
Faculty sign	nature		Date :

# **REFLECTIONS: COMPETENCIES REQUIRING DOCUMENTATION**

SI.	Patient Name	Age/Sex	UHID No :
No	Diagnosis:		
Student Pres	senter		Date
What happe	ned?		
So what?			
What next?			
Faculty sign	ature		Date :

#### **III. SKILL LEARNING SESSIONS**

#### A. CERTIFIABLE PROCEDURAL SKILLS

Neonatal resuscitation (D)\*

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

#### Setting up Pediatric IV infusion and calculating drip rate (I)\*\*

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

Setting up Pediatric interosseous line (O)\*\*\*

Date Completed	Attempt at Competency (F/R/Re)	Rating (B/M/E) **	Decision of Faculty (C/R/Re)	Initial of Faculty &Date	Feedback Received Initial of Learner with Date

\*D: Demonstration on patients or simulations and performance under supervision in patients

**\*\*I:** Independently performed on patients

**\*\*\*O:** Observed in patients or on simulations

### **REFLECTIONS: NEONATAL RESUSCITATION**

		A /C	
SI. No	Patient Name	Age/Sex	UHID No :
110	Diagnosis:		
Student Pre	senter		Date
What happe	mod?		
w nat nappe	sheu?		
So what?			
What next?			
Faculty sign	nature		Date :

#### **REFLECTIONS: SETTING UP PEDIATRIC IV INFUSION AND** CALCULATING DRIP RATE

Sl. No	Patient Name	Age/Sex	UHID No :
190	Diagnosis:		
Student Pres	senter		Date
	senter		Date
What happe	ned?		
So what?			
So white.			
What next?			
Faculty sign	ature		Date :
1			

# **REFLECTIONS: SETTING UP PEDIATRIC IV INFUSION AND**

SI. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	esenter		Date
What happe	ened?		
So what?			
What next?			
Faculty sign	nature		Date :

<b>B. OTHER SKILLS*</b>
-------------------------

Sl. No	Competency No.	Competency Detail	Date Completed	Faculty Signature	Feedback Received Initial of Learner with Date

\*Departments can decide on including other skills taught.

#### **REFLECTIONS: OTHER SKILLS**

SI. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	senter		Date
What happe	ened?		
So what?			
What next?			
Faculty sign	nature		Date :

#### IV. AFFECTIVE COMPETENCIES REQUIRING DOCUMENTATION

#### **Summary of Affective Competencies:**

SI. No	Competency No.	Competency Detail	Date Completed	Integration	Faculty Signature
1.	PE 2.3	Counselling a parent with failing to thrive child			
2.	PE 3.4	Counsel a parent of a child with developmental delay			
3.	PE 6.8	Respecting patient privacy and maintaining confidentiality while dealing with adolescents.			
4.	PE 7.8	Educate mothers on antenatal breast care and prepare mothers for lactation.			
5.	PE 7.9	Educate and counsel mothers for best practices in breast feeding.			
6.	PE 7.10	Respects patient privacy			
7.	PE 7.11	Participate in Breast Feeding Week celebration			
8.	PE 8.5	Counsel and educate mothers on the best practices in complementary feeding.			
9.	PE 10.5	Counsel parents of children with SAM and MAM.			
10.	PE 19.7	Educate and counsel a patient for immunization.			
11.	PE 19.8	Demonstrate willingness to participate in the national and subnational immunization days			

· · · · ·		- 1	
12.	PE 20.5	Counsel /educate mothers on the care of neonates.	
13.	PE 21.16	Counsel / educate a patient for referral appropriately	
14.	PE 22.2	Counsel a patient with chronic illness	
15.	PE 23.18	Demonstrate empathy while dealing with children with cardiac diseases in every patient encounter.	
16.	PE 26.13	Counsel and educate patients and their family appropriately on liver diseases	
17.	PE 27.32	Counsel parents of dangerously ill / terminally ill child to break bad news	
18.	PE 27.33	Obtain informed consent	
19.	PE 27.34	Willing to be a part of the ER team	
20.	PE 27.35	Attends to emergency calls promptly	
21.	PE 29.19	Counsel and educate patients about prevention and treatment of anemia.	
22.	PE 32.5	Counsel parents regarding Present child Risk in next pregnancy (Down's Syndrome)	
23.	PE 32.10	Counsel parents regarding Present child Risk in next pregnancy	
		(Turner Syndrome)	

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pres	senter		Date
What happe	ned?		
So what?			
What next?			
Faculty sign	nature		Date :

SI. No	Patient Name	Age/Sex	UHID No :
	Diagnosis:		
Student Pres	senter		Date
What happe	ened?		
So what?			
What next?			
what next:			
Faculty sigr	nature		Date :

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pres	senter		Date
What happe	ned?		
So what?			
What next?			
Faculty sign	nature		Date :

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pres	senter		Date
What happe	ned?		
So what?			
What next?			
Faculty sign	nature		Date :

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pres	senter		Date
What happe	ned?		
So what?			
What next?			
Faculty sign	nature		Date :

#### V. CLINIC/FIELD VISITS

#### Summary of Clinic/Field Visits:

Visit to	Number	Competency	Date Completed	Reference Page No.
Child Developmental Unit	PE 3.7	Visit a Child Developmental Unit and observe its functioning		
		<b>Topic:</b> Developmental Delay & Cerebral palsy		
Child Guidance Clinic	PE 4.6	Visit to the Child Guidance Clinic <b>Topic:</b> Scholastic backwardness, Learning Disabilities, Autism, ADHD		
	PE 5.11	Visit to Child Guidance Clinic and observe functioning		
		<b>Topic:</b> Common Problems related to Behaviour		
Adolescent Clinic	PE 6.11	Visit to the Adolescent Clinic		
Rural Health Center	PE 18.8	Observe the implementation of the program by visiting the Rural Health Centre		
Immunization Clinic	PE 19.10	Observe the handling and storing of vaccines		
	PE 19.11	Document immunization in an immunization record		
	PE 19.12	Observe the administration of UIP vaccines		
	PE 19.14	Practice infection control measures and appropriate handling of the sharps		

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	senter		Date
What happe	med?		
So what?			
What next?			
Faculty sigr	nature		Date :

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pres	senter		Date
What happe	ened?		
So what?			
What next?			
Faculty sigr	nature		Date :

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	senter		Date
What happe	med?		
So what?			
What next?			
Faculty sigr	nature		Date :

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	senter		Date
What happe	med?		
So what?			
What next?			
Faculty sigr	nature		Date :

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pres	senter		Date
What happe	ned?		
So what?			
What next?			
Faculty sign	nature		Date :

Summary of Departmental Activities\*:

Activity	Details/Competency Addressed:	Date	Faculty Signature
Participation in celebration and IEC			
activities like Breast feeding Week,			
National Newborn Week, World			
Immunization Week, World –			
Tuberculosis Day, World Health			
Day, World Asthma Day, World			
Thalassemia Day*			
Participation in IAP/ Other Quiz			
Participation in ICMR STS/ Other Research Projects			
Researchpaper presented/ submitted/ published			
Participation in Seminars/Conferences & Role			
Other Activities			
Pediatric Specialties			

\**This is only an illustrative list and departments can include actual events.* 

# **REFLECTIONS: PARTICIPATION IN DEPARTMENTAL ACTIVITIES**

Sl. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pres	senter		Date
What happe	med?		
So what?			
What next?			
Faculty sign	nature		Date :

# **REFLECTIONS: PARTICIPATION IN DEPARTMENTAL ACTIVITIES**

Sl. No	Patient Name	Age/Sex	UHID No :
	Diagnosis:		
Student Pres	senter		Date
			Date
What happe	ened?		
So what?			
50 what:			
What next?			
Faculty sign	nature		Date :

# BLDE (Deemed to be University) VII. SELF-DIRECTED LEARNING

#### Phase III (Part I)

Self-Directed Learning

Topic:

**Objectives:** 

Task:

Methodology:

### **REFLECTIONS: SELF-DIRECTED LEARNING**

SI. No	Patient Name	Age/Sex	UHID No :
	Diagnosis:		
Student Pres	senter		Date
What happe	med?		
So what?			
What next?			
w nat next?			
Faculty sign	ature		Date :

Phase III (Part II)

Self-Directed Learning

Topic:

**Objectives:** 

Task:

Methodology:

### **REFLECTIONS: SELF-DIRECTED LEARNING**

SI. No	Patient Name	Age/Sex	UHID No :
	Diagnosis:		
Student Pres	senter		Date
What happe	ned?		
So what?			
What next?			
what next?			
Faculty sign	ature		Date :

# BLDE (Deemed to be University) VIII. INTEGRATED LEARNING SESSIONS

#### Summary of Integrated Learning Sessions:

Sl. No.	Competency No.	Торіс	Departments Involved	Date

#### **REFLECTIONS: INTEGRATED LEARNING SESSIONS**

Phase II					
SI. No	Patient Name		Age/Sex	UHID No :	
	Diagnosis:				
Student Pres	senter			Date	
What happe	ned?				
C 1+9					
So what?					
What novt?					
What next?					
Faculty sign	ature			Date :	

#### **REFLECTIONS: INTEGRATED LEARNING SESSIONS**

Phase III (Part I)					
SI. No	Patient Name		Age/Sex	UHID No :	
110	Diagnosis:				
Student Pres	senter			Date	
What happe	med?				
<u><u><u></u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>					
So what?					
What next?					
Faculty sign	nature			Date :	
				Luce .	

#### **REFLECTIONS: INTEGRATED LEARNING SESSIONS**

Phase III (Part II)

SI. No	Patient Name Diagnosis:	Age/Sex	UHID No :
Student Pre	esenter		Date
What happe	ened?		
So what?			
What next?			
Faculty sign	nature		Date :