BLDE UNIVERSITY

PG CURRICULUM
2016-17
M.S. General Surgery

Published by

BLDE UNIVERSITY

[Declared as Deemed to be University u/s 3 of UGC act, 1956, vide notification No.F.9-37/2007-U.3(A)]

The Constituent College

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

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The Constituent College

SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL AND RESEARCH CENTRE

BLDEU/REG/PG/2016-17/ 505 June 18, 2016

NOTIFICATION

Subject: Revised Curriculum for the Post Graduate Degree and Diploma Course-2016

Reference:

1. Medical Council of India Regulation on Graduate Medical Education, 1997 and subsequent amendments of the same from time-to-time.
2. Minutes of the meeting of the Academic Council of the University held on April 29, 2016.
3. Minutes of the meeting of the BOM of the University held on June 18, 2016.

The Board of Management of University is pleased to approve the Curriculum for Post Graduate Degree and Diploma Course at its meeting held on June 18, 2016.

The revised curriculum shall be effective, from the Academic Session 2016-17 onwards, for Post Graduate Degree and Diploma Course in the Constituent College of the University viz. Shri B. M. Patil Medical College, Hospital and Research Centre, Vijayapura.

REGISTRAR

REGISTRAR
BLDE University, Vijayapura.

To,
The Dean, Faculty of Medicine and Prinicpal
Shri B. M. Patil Medical College,
Hospital and Research Centre,
Vijayapura.

Copy to:-

- The Secretary, UGC, New Delhi
- The Controller of Examinations
- Prof. & HODs of Pre, Para and Clinical Departments.
- PS to Hon'ble President
- PS to Hon'ble Vice-Chancellor

Vision & Mission

- Excellence in all our endeavours.

- Committed to provide globally competitive quality medical education.

- Provide the best health care facilities in this backward region, in particular, to socially disadvantaged sections of the society.

- Constantly striving to become a Reputed research University with world-class infrastructure, latest tech-tools for teaching/research and adopting global best practices.

Section - I

Goals and General Objectives of Postgraduate Medical Education Program

Goal

The goal of postgraduate medical education shall be to produce a competent specialist and / or a medical teacher as stated in the Post Graduate Medical Education Regulations 2000 and its amendments thereof [May2013]

(i) Who shall recognize the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy;

(ii) Who shall have mastered most of the competencies, pertaining to the specialty, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system;

(iii) Who shall be aware of the contemporary advances and developments in the discipline concerned;

(iv) Who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology; and

(v) Who shall have acquired the basic skills in teaching of the medical and paramedical professionals.

General Objectives

At the end of the postgraduate training in the discipline concerned the student shall be able to:

(i) Recognize the importance of the concerned specialty in the context of the health need of the community and the national priorities in the health sector.

(ii) Practice the specialty concerned ethically and in step with the principles of primary health care.

(iii) Demonstrate sufficient understanding of the basic sciences relevant to the concerned specialty.

(iv) Identify social, economic, environmental, biological and emotional determinants of health in a given case, and take them into account while planning therapeutic, rehabilitative, preventive and promotive measures/strategies.

(v) Diagnose and manage majority of the conditions in the specialty concerned on the basis of clinical assessment, and appropriately selected and conducted investigations.

(vi) Plan and advice measures for the prevention and rehabilitation of patients suffering from disease and disability related to the specialty.

(vii) Demonstrate skills in documentation of individual case details as well as morbidity and mortality data relevant to the assigned situation.

(viii) Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behavior in accordance with the societal norms and expectations.

(ix) Play the assigned role in the implementation of national health programs, effectively and responsibly.

(x) Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field situation.

(xi) Develop skills as a self-directed learner; recognize continuing educational needs; select and use appropriate learning resources.

(xii) Demonstrate competence in basic concept of research methodology and epidemiology, and be able to critically analyse relevant published research literature.

(xiii) Develop skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and paramedical health workers.

(xiv) Function as an effective leader of a team engaged in health care, research or training.

Statement of the Competencies

Keeping in view the general objectives of postgraduate training, each discipline shall aim at development of specific competencies, which shall be defined and spelt out in clear terms. Each department shall produce a statement and bring it to the notice of the trainees in the beginning of the program so that he or she can direct the efforts towards the attainment of these competencies.

Components of the PG Curriculum

The major components of the PG curriculum shall be:

- Theoretical knowledge
- Practical/clinical Skills
- Training in writing thesis/research articles
- Attitudes, including communication.
- Training in research methodology, medical ethics & medicolegal aspects
- Teaching skills to the undergraduates, juniors and support teams

Source: Medical Council of India, Regulations on Postgraduate Medical Education, 2000. [amended upto May2013]

Eligibility for Admission:

Eligibility requirements for Post Graduate Diploma and Degree Courses are: -

1. The candidates seeking admission to these courses should have passed MBBS from the college recognized by Medical Council of India.

Eligibilty requirements for Post graduate degree in superspeciality courses,M.Ch./D.M are:

The candidate seeking admission to these courses should have passed MS/MD from the college recognized by Medical Council of India.

2. As per the requisitions of statutory bodies, as laid out in post graduate regulations 2000 of Medical Council of India and its amendments thereof, the minimum percentage of marks in the entrance test conducted by the University for eligibility for admission to Post Graduate courses in broad specialties and super specialties shall be 50 percent for candidates belonging to General category and 40 percent for the candidates belonging to

Scheduled Caste, Scheduled Tribes and Other Backward Classes. Eligibility for persons with locomotor disability of lower limbs category ranging from 30-70% will be 45 percent.

Eligibility for Foreign / PIO / NRI students will be based on qualifying examination marks.

The MCI norms to qualify for Admissions

Candidates seeking admission to these Post Graduate Degree courses should have passed M.B.B.S. recognised by Medical Council of India or equivalent qualification and should have obtained permanent Registration from the Medical Council of India or any of the State/ Medical council or candidate should register the same within one month from the date of admission, failing which the admission of the candidate shall be cancelled. Provided that in the case of a foreign national, the MCI may on the payment of prescribed fee for the registration, grant temporary registration for the duration of post graduate training restricted to the medical college/ institute to which the applicant is admitted for the time being exclusively for post graduate studies; provided further, that temporary registration to such foreign national shall be subjected to the condition that such person is duly registered with appropriate registering authority in his /her country wherefrom he has obtained his basic medical qualification ,and is duly recognized by the corresponding Medical Council or concerned authority..

If the candidate fails to fulfill the relevant eligibility requirements as mentioned above he/she will not be considered eligible for admission for Medical Postgraduate Degree and Diploma Courses even if he/she is placed in the merit list of BLDEU-PGET/BLDEU-SUPERSPECIALTY ET.

Obtaining Eligibility Certificate by the University before making Admission

Candidate shall not be admitted for any postgraduate degree/diploma course unless he/she has obtained and produced the eligibility certificate used by the University. The candidate has to make an application to the University with the following documents along with the prescribed fee:

1. MBBS pass/degree certificate issued by the University.
2. Marks cards of all the university examinations passed MBBS course.
3. Attempt Certificate issued by the Principal
4. Certificate regarding the recognition of the Medical College by the Medical Council of India.
5. Completion of internship certificate.
6. In case internship was done in a non-teaching hospital, a certificate from the Medical Council of India that the hospital has been recognized for internship.

7. Registration by any State Medical council and
8. Proof of SC/ST or OBC or physically handicapped status, as the case may be.

In addition to the above mentioned documents, candidate applying for admission to superspeciality courses has to produce degree/pass certificate of MD/MS degree with prescribed fee.

Intake of Students

The intake of students to each course shall be in accordance with the ordinance in this behalf.

Course Duration

a. M.D. / M.S. Degree Courses:
   The course of study shall be for a period of 3 years consisting of 6 terms including examinations. For Candidates possessing recognized two year Postgraduate Diploma in the same subject the duration of the course shall be two years including examinations. (MCI PG REG 2000 10:1)
b. D.M/M Ch Degree Courses; (MCI PG REG 2000, 10:2)
   The duration of these courses shall be for a period of 3 years including examinations.
c. Diploma Courses:
   The course of study shall be for a period of 2 years consisting of 4 terms including examinations (MCI PG REG 2000, 10.3).

Training Method

The postgraduate training for degree/diploma shall be of residency pattern. The post graduate shall be trained with graded responsibilities in the management and treatment of patients entrusted to his/her care. The participation of the students in all facets of educational process is essential. Every candidate should take part in seminars, group discussions grand rounds, case demonstration, clinics, journal review meetings, CPC and clinical meetings.. Every candidate should be required to participate in the teaching and training program of undergraduate students. Training should include involvement in laboratory and experimental work, and research studies. Basic medical sciences students should be posted to allied and relevant clinical departments or institutions. Exposure to applied aspects of their learning should be addressed Similarly, clinical subjects' students should be posted to basic medical sciences and allied specialty departments or institutions.

Training of superspecialty should follow similar pattern. In addition, they have to be trained in advanced techniques of diagnosis and treatment pertaining to their specialty, participate actively in surgical operations [M.Ch] as well.

Attendance, Progress and Conduct

A candidate pursuing degree/diploma course should work in the concerned department of the institution for the full period as a full time student. No candidate is permitted to run a clinic/laboratory/nursing home while studying postgraduate course

Each year shall be taken as a unit for the purpose of calculating attendance. Every student shall attend symposia, seminars, conferences, journal review meetings, grand rounds, CPC, case presentation, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons. Every Candidate is required to attend a minimum of 80% of the training during each academic year of the post graduate course. This shall include assignments, assessment of full time responsibilities and participation in all facets of educational process. Provided further, leave of any kind shall not be counted as part of academic term without prejudice to minimum 80% attendance of training period every year. Leave benefits shall be as per university rules.

A post graduate student pursuing degree course in broad specialities, MD, MS and superspeciality courses DM, M.Ch would be required to present one poster presentation, read one paper in national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him/her to be eligible to appear at the university degree examinations. (MCI, PG 2000, 13.9)

Any student who fails to complete the course in the manner stated above shall not be permitted to appear for the University Examinations.

Monitoring Progress of Studies

The learning process of students should be monitored through continuous appraisal and regular assessment. It not only helps teachers to evaluate students, but also students to evaluate themselves. The monitoring is done by the staff of the department based on participation of students in various teaching / learning activities. It may be structured and assessment done by using checklists that assess various aspects.

The learning out comes to be assessed include:

- Personal Attitudes,
- Acquisition of Knowledge,
- Clinical and operative skills, skills of performing necessary tests/experiments
- Teaching skills.

Personal Attitudes:

The essential items are:

- Caring attitude, empathy
- Initiative in work and accepting responsibilities
- Organizational ability
- Potential to cope with stressful situations and undertake graded responsibility
- Trust worthiness and reliability
- To understand and communicate intelligibly with patients and others

- To behave in a manner which establishes professional relationships with patients and colleagues
- Ability to work in team
- A critical enquiring approach to the acquisition of knowledge

The Methods used mainly consist of observation. Any appropriate methods can be used to assess these. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers. However every attempt should be made to minimize subjectivity.

Acquisition of Knowledge:

Lectures: Lectures/theory classes as necessary may be conducted. It is preferable to have one class per week if possible. They may, be employed for teaching certain topics. Lectures may be didactic or integrated.

a) Didactic Lectures: Recommended for selected common topics for post graduate students of all specialties. Few topics are suggested here.

- Bio-statistics
- Use of library,
- Journal review
- Use of computers,
- Appropriate use of AV aids
- Research Methods,
- Search of literature,
- Rational drug therapy
- Medical code of Conduct and Medical Ethics
- National Health and Disease Control Programmes
- Communication skills etc.
- Bio medical waste

These topics may preferably taken up in the first few weeks of the 1st year commonly for all new postgraduates. The specialty wise topics can be planned and conducted at departmental level.

b) Integrated teaching: These are recommended to be taken by multidisciplinary teams for selected topics, eg. Jaundice,Diabetes mellitus,thyroid diseases etc. They should be planned well in advance and conducted.

Journal Review Meeting (Journal club):

The ability to do literature search, in depth study, presentation skills, use of audio – visual aids, understanding and applying evidence based medicine are to be focused and assessed. The assessment is made by faculty members and peers attending the meeting using a checklist.

Seminars / symposia:

The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio – visual aids are to be assessed using a checklist.

Clinico-Pathological conferences:

This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

Medical Audit: Periodic morbidity and mortality meeting be held. Attendance and participation in these must be insisted upon. This may not be included in assessment.

Clinical Skills: Day to Day Work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills

Clinical Meetings:

Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list.

Group discussions:Group discussions are one of the means to train and assess the student's ability to analyse the given problem or situation, apply the knowledge and make appropriate decisions.This method can be adopted to train and assess the competency of students in analyzing and applying knowledge.

Death review meetings/Mortality meetings: Death review meetings is important method for reflective learning. A well conducted morbidity and mortality meetings bring about significant reduction in complications, improve patient care and hospital services. They also address system related issues. Monthly meetings should be conducted with active participation of faculty and students. Combined death review meetings may be required wherever necessary.

Clinical and Procedural Skills:

The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the log book.

Teaching Skills:

Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students

Work diary / Log Book:

Every candidate shall maintain a Work Diary/Log Book and record his/her participation in the training programs conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, conducted by the candidate. A well written and validated Log Book reflects the competencies attained by the learner and points to the gaps which needs address. This Log Book shall be scrutinized by concerned teachers periodically and

certified, by the Head of Department and Head of the Institution, and presented during University Practical / Clinical examination.

Periodic Tests:

In case of degree courses of three years duration (MD/MS, DM, M.Ch), the concerned departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practical / clinical and viva voce.

One of these practical/clinical tests should be conducted by OSPE (objective structured practical examination or OSCE (objective structured clinical examination) method.

.Records and marks obtained in such tests will be maintained by the Head of Department and sent to the University, when called for,

In case of diploma courses of two years duration, the concerned departments may conduct two tests, one of them be at the end of first year and the other in the second year three months before the final examination. The tests may include written papers, practical /clinical and viva voce.

One of these practical/clinical tests should be conducted by OSPE or OSCE method.

Records: Records and marks obtained in tests will be maintained by the Head of the Departments and will be made available to the University or MCI.

Procedure for defaulter:

Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In extreme cases of default the departmental committee may recommend that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

Dissertation: Every candidate pursuing MD/MS degree course is required to carry out work on a selected research project under the guidance of a recognized post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.

The dissertation is aimed to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis and comparison of results and drawing conclusions.

Every candidate shall submit to the Registrar (Academic) of the University in the prescribed proforma, a synopsis containing particulars of proposed dissertation work within six months from the date of commencement of the course on or before the dates notified by the University. The synopsis shall be sent through the proper channel.

Such synopsis will be reviewed and the dissertation topic will be registered by the University. No change in the dissertation topic or guide shall be made without prior approval of the University.

The dissertation shall be written under the following headings:

1. Introduction
2. Aims or Objectives of study

3. Review of Literature
4. Material and Methods
5. Results
6. Discussion
7. Conclusion
8. Summary
9. References
10. Tables
11. Annexure

The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and other annexure. It should be neatly typed in double line spacing on one side of paper (A4 size, 8.27" x 11.69") and bound properly. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the Institution.

Adequate number of copies as per norms and a soft copy of dissertation thus prepared shall be submitted to the Controller of Examinations six months before final examination on or before the dates notified by the University.

The dissertation shall be valued by examiners appointed by the university. Acceptance of dissertation work is an essential precondition for a candidate to appear in the University examination.

Guide:

The academic qualification and teaching experience required for recognition by this University as a guide for dissertation work is as per Medical Council of India Minimum Qualifications for Teachers in Medical Institutions Regulations, 1998 and its amendments thereof. Teachers in a medical college/institution having a total of eight years teaching experience out of which at least five years teaching experience as Lecturer or Assistant Professor gained after obtaining post graduate degree shall be recognized as post graduate teachers.

A Co-guide may be included provided the work requires substantial contribution from a sister department or from another medical institution recognized for teaching/training by this University / Medical Council of India. The co-guide shall be a recognized post graduate teacher of BLDE University

Change of guide:

In the event of a registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from the university.

Schedule of Examination:

The examination for M.D. /M.S and DM/M.Ch courses shall be held at the end of three academic years (six academic terms). The examination for the diploma courses shall be held at the end of two academic years (four academic terms).

The university shall conduct two examinations in a year at an interval of four to six months between the two examinations. Not more than two examinations shall be conducted in an academic year.

Scheme of Examination

M.D. /M.S. Degree

M.D. / M.S. Degree examinations in any subject shall consist of dissertation, written papers (Theory), Practical/Clinical and Viva Voce.

Dissertation:

Every candidate shall carryout work and submit a Dissertation as indicated above. Acceptance of dissertation shall be a precondition for the candidate to appear for the final examination.

Written Examination (Theory):

Written examination shall consist of **four** question papers, each of **three** hours duration. Each paper shall carry 100 marks. Out of the **four** papers, the 1st paper in clinical subjects will be on applied aspects of basic medical sciences. Recent advances may be asked in any or all the papers. In basic medical subjects and para-clinical -subjects, questions on applied clinical aspects should also be asked.

Practical / Clinical Examination:

In case of practical examination, it should be aimed at assessing competence and skills of techniques and procedures as well as testing students ability to make relevant and valid observations, interpretations and inference of laboratory or experimental work relating to his/her subject.

In case of clinical examination, it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and two short cases minimum. However additional assessment methods can be adopted which will test the necessary competencies reasonably well.

The total marks for Practical / clinical examination shall be 200.

Viva Voce:

Examination shall aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills.

The total marks shall be 100:

- 80 Marks, for examination of all components of syllabus
- 20 Marks for Pedagogy

Examiners:

There shall be at least four examiners in each subject. Out of them two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

Criteria for declaring as pass in University Examination: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical/clinical and (3) viva voce examination. The candidate should pass independently in practical/clinical examination and Viva Voce vide MCI pg 2000 reg no 14(4) (Ciii)

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Controller of Examinations.

Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate of marks is 75 percent and above.

Distinction will not be awarded for candidates passing the examination in more than one attempt.

D.M/M.Ch Degree

DM/M.Ch Degree examinations in any subject shall consist of written theory papers (theory), practical/clinical and Viva voce.

Written Examination (Theory):

Written examination shall consist of **four** question papers, each of **three** hours duration. Each paper shall carry 100 marks. Out of the **four** papers, the 1st paper in clinical subjects will be on applied aspects of basic medical sciences. Recent advances may be asked in any or all the papers. In basic medical subjects and para-clinical - subjects, questions on applied clinical aspects should also be asked.

Practical / Clinical Examination:

In case of practical examination, it should be aimed at assessing competence and skills of techniques and procedures as well as testing students ability to make relevant and valid observations, interpretations and inference of laboratory or experimental work relating to his/her subject.

In case of clinical examination, it should aim at examining clinical skills, competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and two short cases.

The total marks for Practical / clinical examination shall be 200.

Viva Voce:

Examination shall aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills.

The total marks shall be 100:

- 80 Marks, for examination of all components of syllabus
- 20 Marks for Pedagogy

Examiners:

There shall be at least four examiners in each subject. Out of them two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

Criteria for declaring as pass in University Examination: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical including clinical and(3)viva voce examination. The candidate should pass independently in practical/clinical examination vide MCI pg 2000 reg no 144-c (iii).

Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate of marks is 75 percent and above.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Controller of Examinations.

Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate of marks is 75 percent and above.

Distinction will not be awarded for candidates passing the examination in more than one attempt.

Diploma Examination:

Diploma examination in any subject shall consist of Theory (written papers), Practical / Clinical and Viva-Voce.

Theory:

There shall be **three** written question papers each carrying 100 marks. Each paper will be of **three** hours duration. In clinical subjects one paper out of this shall be on basic medical sciences. In basic medical subjects and Para clinical subjects, questions on applied clinical aspects should also be asked.

Practical / Clinical Examination:

In case of practical examination it should be aimed at assessing competence, skills related to laboratory procedures as well as testing students ability to make relevant and valid observations, interpretation of laboratory or experimental work relevant to his/her subject.

In case of clinical examination, it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and two short cases.

The maximum marks for Practical/Clinical shall be 150.

Viva-Voce Examination: Viva Voce examination should aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills. The total marks shall be 50.

Criteria for declaring as pass in University Examination: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical / clinical and viva voce examination.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Controller of Examinations.

Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate of marks is 75% and above. Distinction will not be awarded for candidates passing the examination in more than one attempt.

Examiners:

There shall be at least four examiners in each subject. Out of them, two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

Number of Candidates per day:

The maximum number of candidates for practical / clinical and viva-voce examination shall be as under:

MD / MS Courses: Maximum of 8 per day
Diploma Course: Maximum of 8 per day
DM/M.Ch Maximum of 3 per day

Section-II

Curriculum of M.S. General Surgery

GOALS

The goals of postgraduate training for M.S. General Surgery students would be to train a M.B.B.S.doctor who will be capable and competent to:

Practice general surgery with adequate competency and skills with sound knowledge.
Practice general surgery in ethical manner, with empathy and due care to the needy.
Continue to update with the advances regularly.
Treat his team and juniors as learners and share his knowledge and skills.
Be aware of national priorities in health and serve as per need towards achieving the goals of national health policies.

Objectives:

The following objectives are laid out to achieve the goals of the course. These objectives are to be achieved by the time the candidate completes the course. The Objectives are considered under the sub headings.

- Knowledge (Cognitive domain)
- Skills (Psycho motor domain)
- Human Values, Ethical practice and Communication abilities (Affect or domain)

Knowledge:

A list of objectives related to knowledge and higher cognitive abilities that are expected to be achieved during the course are given.

At the end of the training, the candidate must be able and competent to:

- Understand and describe aetiology, pathophysiology principles of diagnosis and management of common surgical problems including emergencies and apply it in management of patients
- Understand, describe and practice effectively the indications and methods for fluid and electrolyte replacement therapy including blood transfusion nutrition.
- Demonstrate understanding of basic sciences relevant to general surgery, diagnose and manage and describe common malignancies in the country and their management including prevention.
- Identify social, economic, environmental and emotional determinants in a given case, and take them into account during planning therapeutic measures, advice regarding the operative or non-operative management of the case and to carry out the management effectively.
- Undertake audit, use information technology tools and carry out research, both basic and clinical, with the intent of generating knowledge &spread it through publications and presentations for the benefit of scientific community and general public.

- Recognize & refer conditions outside the competency level to appropriate expertise.
- Attend, update and upgrade professional skills regularly as required by participating in instructional courses, workshops, CMEs, conferences or training programmes.
- Be a good teacher by inculcating teaching methodology and skills so as to teach students, colleagues and support staff.
- Educate the society regarding awareness and preventive aspects of various surgical disorders.
- Use evidence based medicine and effectively &advocate them in decision making.
- Be capable of managing medico-legal aspects of trauma and other surgical conditions.
- Be effective team leaders in secondary health care facilities.

Skills

- Be a competent clinician to take proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reasonable diagnosis about the surgical conditions.
- Be a competent surgeon to Perform minor operative procedures and common general surgical operations independently and the major procedures under supervision of a senior surgeon.
- Competent in providing Basic and advance life saving support services (BLS & ALS) in emergencies and manage them, manage poly trauma, acute surgical emergencies including abdominal and thoracic emergencies
- Undertake thorough wound management including various traumatic wounds and burns.
- Provide total care to the patient with complete monitoring before and after surgery until recovery or is rehabilitated.

Human Values, Ethical practice and Communication abilities

- Practice surgery ethically and provide care irrespective of other considerations like caste, creed, religion etc. and social status.
- Be honest and maintain professional integrity in all aspects of patient care.
- Be a good communicator who can explain patients in lay terms the outcome, various options of management and obtain true informed consent.
- Be able to respect patients' autonomy, confidentiality, right for information and decision making.
- Understand the limitations of his knowledge and skills and ask for help from experts and colleagues.
- Follow ethical guidelines during research in animals or human subjects.
- Be a motivated leader to bring about best in his team.

Essential Knowledge

The course contents have been identified and categorized as essential knowledge as under. This is to enable the student to achieve the objectives of the course. It is recognized that General surgery today mainly covers trauma, abdominal operations, thyroid, breast diseases, hernias etc. A general surgeon should also have knowledge of some common problems in allied specialties. Further he/she should be familiar with complications, current controversies and recent advances in these topics.

The topics are considered under:

- Basic sciences,
- General Surgery topics and
- Specialty topics
- Some overlap between the latter two categories are to be expected.

Basic Sciences include anatomy, physiology, biochemistry, microbiology and pathology, as found in current textbooks. These standard topics are recommended to be studied in as much as they are applicable to the practice of surgery. The stress is on applied anatomy, of the parts dealt with by the surgeon as defined by the skills list. Proper understanding of patho-physiology and surgical pathology are also required.

General Surgery Topics include the following:

- **Clinical History and examination:** detailed systematic history taking, clinical examination of various systems, coming to a provisional working diagnosis.

- **The Metabolic Response to Injury**

- **Fluid and electrolyte balance / Acid – Base balance**. The body fluid compartments; metabolism of water and electrolytes; factors maintaining homeostasis; causes for and treatment of acidosis and alkalosis.

- **Shock and Blood transfusion**: Blood grouping & cross matching, blood component therapy Indications and complications of blood transfusion, blood substitutes; auto transfusions.

- **Wounds, Tissue Repair and Scar:** Wound management, Tissue repair & Scars: Types and pathogenesis of wounds, types of healing, factors influencing healing management of wounds and management of scars. Basic surgical techniques; properties of suture materials; appropriate use of sutures and other materials used for management of wound.

- **Surgical infections**: asepsis and antisepsis, microbiological principles, rational use of antibiotics. Special infections like synergistic gangrene, and other uncommon infections. Understanding and following universal precautions.

- **HIV:** Pathogenesis, Prevalence, Surgical diseases & management with special reference to universal precautions, post exposure prophylaxis and chemotherapy. Awareness and management of ART related complications and various surgical diseases in HIV/AIDS.

- **Diabetes and Surgeon**: Diabetes related surgical problems and their management, Diabetic foot, pathogenesis, grades, and management.

- **Surgical nutrition**: nutritional assessment; metabolic response to stress; need for nutritional support; enteral nutrition; routes of access to GI tract; parenteral nutrition; access to central veins for nutritional support.

- **Skin and Soft Tissue:** ulcer, sinus, fistula, cysts and tumours (benign & malignant)

- **Soft tissue sarcomas**: Classification and types of soft tissue sarcomas. Principles of management of soft tissue sarcomas.

Imaging modalities in surgery

- Conventional X-rays and contrast radiography.
- CT, MRI, MRCP& other relevant procedures.
- Ultrasound and Doppler
- Image guided interventional procedures.

GI endoscopy:

- Principles of GI endoscopy
- Complications including infective considerations
- Diagnostic and therapeutic GI endoscopy including upper GI, lower GI and pancreato biliary systems.

Tissue Diagnosis: methodologies of taking biopsies, preservation and transport.

Principles of evidenced based medicine:

Understanding journal based literature study; the value of textbook, reference book articles; value of review articles; original articles and their critical assessment. Understanding the value of retrospective, prospective, randomized controlled and blinded studies. Understanding the principles and meanings of various biostatistical tests applied in these studies.

Use of computers in surgery: Components of a computer; its use in practice-principles of word processing, spread sheet functions, database and presentation; the Internet and its uses. Basics of recording and preservation using & audio visual aids of operative procedures etc. The value of computer based systems in bio-medical equipment.

Health Care /hospital establishment

- Establishment of working setup
- Setting up of hospital and OT in single unit
- Setup at periphery
- Regulatory requirements in setting up
- Minimum facilities to be provided in such establishments
- Basic understanding of finances and insurance etc.

Surgical Audit and Biostatistics

- Principles of surgical audit
- Understanding the audit of process and outcome
- Methods adopted for the same.
- Bio statistics

Preoperative Preparation/workup: concept of fitness for surgery; basic medical workup; Workup in special situations like, diabetes, renal failure, cardiac and respiratory illness; risk stratification;

Basic Surgical Skills and Anastomosis: scrubbing gowning, gloving Instruments, trolley layout Sutures, Drains, their maintenance & sterilization.etc

Principles of operative surgery like asepsis, antisepsis, sterilization and OT setup. Concepts of safe surgery practices

Postoperative care: concept of recovery room care; airway management, assessment of wakefulness; management of cardiovascular instability in this period; criteria for shifting to a ward; pain management.

Biomedical waste management with special references to waste generated in O.T and wards.

Trauma surgery:

- Introduction to trauma
- Early assessment and management of polytrauma
- Trauma score
- TRIAGE/ Management of mass casualty
- Pre hospital care
- Trauma to the face and mouth
- Chest and abdomen
- Closed abdominal trauma and flail chest
- Penetrating injuries
- Genitourinary injuries
- Fracture pelvis
- Extremity trauma
- Vascular injuries
- Role of surgeon in natural disasters

Laparoscopic &robotic surgery

- Laparoscopic anatomy of the abdomen
- Physiology of pneumo peritoneum, complications of pneumoperitoneum
- Informed consent for Laparoscopic procedures
- Anaesthetic considerations in Laparoscopic surgery
- Diagnostic laparoscopy
- Pre and post operative management in laparoscopic surgeries
- Recognition and management of Laparoscopic complications
- Principles of diathermy, uses and dangers
- Technology of video imaging, cameras, insufflate or etc.
- Laparoscopic instruments, clips, staplers and port types
- Endoscopic suturing devices

- Medico-legal implications of video-endoscopic surgery
- Principles of uses and dangers of lasers and other energy sources e.g harmonic scalpel

Burns, plastic surgery and reconstructive surgeries

- Burns management
- Facial injuries
- Principles of tissue transfer & skin flaps
- Cleft lip and palate
- Congenital defects of hand
- Pressure sores
- Principles of microsurgery
- Hypospadias

Orthopaedics Surgery

- Healing of fractures
- Non-union, mal-union and osteomyelitis
- Diagnosis and treatment of common fractures and dislocations of joints
- Common disorders of joints
- Principles of joint replacement
- Amputations- Principles and indications
- Malignancies of bone and soft tissue
- Paediatric, orthopaedics.
- Sports Medicine and sports injury

Hand & Foot Surgery

- Applied anatomy of hand and foot
- Common hand infections
- Foot infections with special reference to diabetic foot ,its pathogenesis, management and preventive care

Head & Neck:

- Craniocerebral injuries
- Spinal Injuries
- Peripheral nerve injuries
- Hydrocephalus
- Space occupying intracranial & spinal lesions
- Epilepsy Secondary to surgical causes
- Eye, orbit
- Nose and sinus
- Ear
- Pharynx, larynx and neck
- Oral cavity: non malignant disease of oral cavity, pre malignant lesions
- Malignant tumors of oral cavity, tongue, gum, palate
- Salivary glands

- Lymphnodes of neck and drainage area
- Metastatic cervical nodes and occult primary
- Jaw swellings
- Differential diagnosis of neck swelling or fistula.

ENDOCRINE

Thyroid

- Anatomy, physiology of thyroid &Thyroid function tests
- Hyper and hypothyroidism
- Goitres, autoimmune diseases
- Solitary thyroid nodule-evaluation and management,
- Thyroid cancer
- Thyroid Surgery, techniques and complications

Parathyroid

- Localisation techniques
- Hyperparathyroidism & Hypoparathyroidism
- Surgery-indications, techniques and complications

Adrenal

- Adrenal imaging
- Hyperaldosteronism & Cushing's disease
- Pheochromocytoma and other tumors.

Neuroendocrine tumours of GI tract

- Islet cell tumours
- Gastrinoma
- Carcinoid tumour
- Multiple endocrine neoplasia (Type 1 & 2)
- Gastro intestinal stromal tumors

Breast

- Acute breast infections-abscess
- Nipple discharge
- ANDI
- Benign breast diseases
- Management of non-palpable breast lesion
- Breast cancer- detection, diagnosis and its management,
- Neo adjuvant therapy and follow up.
- Principles of breast conservation and reconstruction
- Screening procedures

Cardiovascular system & heart

- The surgical anatomy and applied physiology of the heart relevant to clinical cases

- Physiology and pharmacological control of cardiac output, blood flow, blood pressure and coronary circulation
- Cardiac arrest, resuscitation
- Monitoring of cardiac function in the critically ill patient, central venous pressure, pulmonary wedge pressure, tamponade, cardiac output measurement
- The interpretation of special investigations
- The management of haemorrhage and shock
- Pulmonary oedema
- Cardiopulmonary bypass-general principles, cardiac support
- Basic principles of Coronary vessel disease & management. Coronary bypass, its indications and management
- Basic principles and management of valvular and pericardial diseases

Respiratory system and surgery of thorax

- The surgical anatomy of the airways, chest wall, diaphragm and thoracic viscera
- The mechanics and control of respiration
- The interpretation of special investigations; lung function tests, arterial blood gases, radiology
- The understanding of disorders of respiratory function caused by trauma, acute surgical illness and surgical intervention
- Respiratory failure & artificial ventilation
- Adult respiratory distress syndrome
- Principles of Bronchoscopy, Thoracoscopy, Mediastinoscopy
- Pulmonary Tuberculosis& surgical management
- Empyema thoracis
- Pulmonary neoplasms
- Complications of thoracic operations

Multisystem Failure

Multisystem failure, its pathogenesis and management of multi organ failure

Vascular Surgery

- Investigation of Vascular disease
- Arterial occlusive disease.& Limb ischemia
- Atherosclerosis, Thrombo angitis obliterans
- Venous disorders of Lower limb
- Varicose veins and management
- Deep vein thrombosis and thromboembolism
- Vascular reconstruction
- Chronic leg ulceration

Diseases of Lymphnodes and lymphatics & spleen

- Congenital abnormalities
- Lymphedema
- Lymphadenopathy
- Malignancies of lymphatic system

- Common pathologies of spleen
- Principles of splenectomy and potential complications
- Prophylaxis after splenectomy

ABDOMINAL SURGERY

Acute abdomen:

- Pathophysiology, differential diagnosis investigations, operative and non operative management of abdominal emergencies complications & management of various nontraumatic abdominal emergencies

Hernias, Umbilicus and Abdominal Wall:

- Simple and complicated hernias
- Various types of hernias, hernia repairs, complications and recent concepts
- Prosthetic materials

The Peritoneum, Omentum, mesentery and retro peritoneum.

- Inflammatory, Benign and malignant disorders
- Abdominal tuberculosis and its management.

Oesophagus:

- Dysphagia,
- GERD,
- Achalasia cardia
- Ca esophagus

Stomach and duodenum

- Peptic ulcer
- Gastric outlet obstruction
- Stress ulcers
- Upper GI tract hemorrhage including obscure GI hemorrhage
- Gastric tumors
- Gastric surgery for obesity
- Bariatric and metabolic surgery

Liver

- Segmental anatomy and principles of segmental resection
- Liver abscess
- Portal hypertension & its management
- Benign cysts 7non-cystic liver lesions
- Hepato cellular carcinoma
- Liver metastasis
- Hepatic failure & Principles of liver transplantation

Biliary system

- Calculous disease and cholecystitis

- Choledochal cysts and Caroli's disease
- Bile duct anomalies & strictures
- Neoplasms of Gall Bladder and Bile duct
- Obstructive Jaundice

Pancreas

- Acute and chronic pancreatitis
- Benign tumours and cysts of the pancreas
- Cancer

Small Intestine and Appendix

- Intestinal obstruction& paralytic ileus
- Meckel's diverticulum
- Intestinal fistulae
- Short bowel syndrome
- Neoplasms and carcinoid syndrome
- Small bowel and mesenteric ischemia
- Appendicitis & other diseases of appendix

Colon, rectum and anus

- Colitis, types, causes and management
- Inflammatory bowel disease: Crohn's disease& Ulcerative colitis
- Irritable bowel syndrome (I.B.S.)
- Colonic ischemia
- Obstruction: Volvulus,Intussusception, malignant obstruction& obstruction due to inflammatory conditions
- Pseudo obstruction
- Rectal prolapse
- Colorectal Cancer, premalignant lesions, polyposis coli and other syndromes etc.
- Colonic cancer screening
- Lower Gastrointestinal hemorrhage
- Anal and perianal disorders:
- Anal and perianal sepsis
- Fissure in ano
- Fistula in ano
- Hemorrhoids
- Anorectal malignancies
- Pilonidal sinus

Urology

- Anatomy of Kidney Ureter bladder, Prostate, Penis
- Genitourinary congenital anomalies polycystic kidney diseases
- Urinary stone disease and principles of management including recent methods
- Urinary Tract Infections, pyonephrosis and perinephric abscess
- Genitourinary injuries
- Hydronephrosis, hydro ureter and other obstructive conditions
- GU Tuberculosis
- Genito urinary malignancies and their management

- Urinary fistula
- Prostate-Benign enlargement of prostate
- Ca prostate
- Urethral strictures
- Scrotal diseases
- Diseases of penis
- Vasectomy

Gynecological Surgery

- Pelvic inflammatory disease
- Ectopic pregnancy
- Ovarian Neoplasms
- Caesarean section, Hysterectomy, management of complications
- Family planning or permanent sterilization methods & management of complications

TRANSPLANTATION

Principles of organ transplantation, renal transplantation and other organ transplants**.**

Principles of Oncology

- Epidemiology of common neoplasms & tumour-like conditions; role of cancer registries.
- Principles of molecular biology of cancer, cell kinetics, carcinogenesis; genetic factors; mechanisms of metastasis.
- Clinico-pathological staging of cancer.
- Pathology, clinical features, diagnosis and principles of management of common cancers in each of the surgical specialties.
- Principles of cancer treatment by surgery, radiotherapy, chemotherapy, immunotherapy and hormone therapy.
- Screening.

Paediatric Surgery

- Fluid and electrolyte management
- Preparation for surgery/post operative care
- Spinal fusion defects
- Ventral defects
- Undescended testes, torsion testes, Hernia, Hydrocoele
- Hypertrophic pyloric stenosis, duodenal atresia
- Hirschprung's disease
- Diaphragmatic hernia
- Tracheo esophageal fistula
- Anorectal anomalies, Neo natal intestinal obstruction
- Necrotising enterocolitis, Intususception and meconium ileus
- Peditric Burns

Surgery in the tropics

- Filariasis
- Hydatid disease, brucellosis, amoebiasis, Hansens disease

- Other parasitic infections

Surgical Ethics

- Definition of medical Ethics
- Difference between medical ethics and bio-ethics
- Major principles of medical Ethics, Beneficence, Justice & Autonomy
- Historical Perspective of medical Ethics
- The Hippocratic oath
- The Declaration of Helsinki
- The WHO Declaration of Geneva
- International code of medical Ethics (1993)
- Medical Council of India Code of Ethics
- The patient as a person
- The Right to be respected
- Truth and confidentiality
- The autonomy of decision
- Informed consent
- Ethical issues regarding surgical procedures, choices and information
- The physician patient relationship
- Prolongation of life
- Advanced life directives; the living will
- Euthanasia
- Cancer and terminal Care.

Professional ethics

- Code of conduct
- Contract and confidentiality
- Charging of fees, Fee-splitting
- Prescription of drugs
- Over-investigating the patient low-cost drugs, vitamins and tonics
- Allocation of resources in health cares
- Malpractice and Negligence
- Research Ethics
- Animal and experimental research
- Human experimentation
- Human volunteer research-Informed Consent
- Drug trials
- ICMR guidelines for Ethical Conduct of Research on humans and animals
- ICH / GCP Guidelines, Schedule Y of the Drugs and Cosmetics Act
- Ethical workup of cases

Essential Surgical Skills

Surgery is a skill-based discipline. The following list is drawn up with a view to specify basic minimum skills to be acquired. While an attempt has been made to specify the year wise distribution of the learning of skills, it is recognized that the process is a continuous

one. The principle of giving graded responsibility to the student is to be applied throughout the course. The year wise distribution of the skills recommended are to be used as general guideline. Some overlap may be there. Provision of training in various specialty subjects has been made during the second year of the course. Skills in specialty subjects may be acquired both during the specialty postings and during the general surgical postings in the parent department, if the procedures are carried out. The list within the tables indicates the surgical procedures that the students should, by the end of the course, be able to perform independently (PI) by himself/herself or should have performed with assistance (PA) during the course. The other categories of surgical procedures mentioned form a general guide for the procedures that the student should either have observed (O) or have assisted the operating surgeon (A). It should be remembered that, for all categories, the student washes up in the operating room. There may an overlap in the skill list between the general surgery list and the specialty list. Where different numbers are mentioned for the same/similar procedures between the general surgery and specialty lists, the higher number is applicable as the prescribed number.

Skills are considered under the following headings:

- Basic graduate skills
- Ward procedures,
- ICU procedures and emergency room procedures
- Preoperative workup procedures and postoperative procedures
- Minor surgical procedures
- Major operating room techniques
- General surgical procedures
- Speciality surgical procedures

Basic graduate skills

The student should have acquired the certain skills during his under-graduation and internship. These skills have to be reinforced at the beginning of the training periods.

These skills include:

Procedure	Category	Number
Insertion of intra venous lines, nasogastric tubes, urinary catheters etc.	PI	50
Minor suturing and removal of sutures	PI	50
Removal of tubes and drains	PI	50
Routine wound dressings	PI	50

Ward Procedures, ICU procedures and emergency room
Procedures

Ward work forms an important part of the training of the surgeon. In addition to the routine examination of the patient with proper recording of findings, diligent practice of the following is recommended.

Procedure	Category	Number
Communication skills with patients, relatives, colleagues and paramedical staff	PI	NA*
Ordering of the requisite laboratory and radiological investigations and interpretation of the reports in light of the clinical picture	PI	NA
Insertion of IV lines & Blood sampling, venous and arterial	PI	NA
Urinary bladder catheterization		
Universal precautions against communicable diseases	PI	NA
Per rectal examination and Proctoscopy	PI	NA
Abdominal paracentesis including diagnostic peritoneal lavage	PI	5
Thoracocentesis	PI	10
Burns dressing	PI	20
Venesection	PI	10
FNAC	PI/PA/O	NA
Ability to teach under graduates and interns	PI	NA

Procedure	Category	Number
Cardio pulmonary resuscitation		
Insertion of Central venous lines	PI	10
Management of airway & insertion of endotracheal tubes	PI	10
Insertion of peritoneal dialysis catheters	O/A	NA
Intercostal drainage	PI	10
Suprapubic Puncture/Stab Cystostomy	PI	5
Tracheostomy	PI	2
Working knowledge of ventilators and various monitors	PI	NA
Interpretation of arterial blood gases	PI	NA
Correction of electrolyte disturbances	PI	NA
Prescribing parenteral & enteral nutrition	PI	NA
Metastatice work up:FNAC/True cut biopsy/imprint cytology	O/A	NA
Application of splints for fractures	PI	NA
Assessment and initial management of Polytrauma	PI	NA
Management of shock and cardiac/respiratory failure	PI	NA
Recognition and initial management of surgical emergencies	PI	NA

Preoperative workup procedures and Postoperative procedures

Procedure	Category	Number
Ability for adequate pre-operative preparation in special situations like diabetes, renal failure, cardiac and Respiratory failure etc. and risk stratification	PI	NA
Communication skills with special reference to obtaining Informed Consent	PI	NA
Proper pre-operative assessment and preparation of patients including DVT prophylaxis, Blood transfusion and antibiotics	PI	NA

OT Procedures	**Category**	**Number**
Instrument arrangement and trolley layout	PA	NA
Skills in sterilization techniques, O.T. Layout and Asepsis	O	NA
Skin preparation, painting and draping	PI	NA
Techniques of scrubbing and gowning	PI	NA

Airway management	PI	NA
Skills for proper fluid & antibiotic management	PI	NA
Management of epidural analgesia	PI	NA
Management of postoperative hypo and hypertension, DVT	PI	NA
Postoperative pain control& physiotherapy	PI	NA
Skills for nutritional rehabilitation of patients	PI	NA
Management of fistulae and stoma care	PI	NA

Minor surgical procedures

Procedure	**Category**	**Number**
Circumcision under local anaesthesia	PI	5
Drainage of abscesses	PI	10
Major dressings	PI	50
Minor anorectal procedures like (haemorrhoids-banding, sclerotherapy,anal dilatation of fissure etc.	PI	10
Minor Biopsies-Lymph node, ulcer, swellings etc.,	PI	20
Reduction and plaster application of simple fractures and dislocations	PA	10
Removal of simple subcutaneous swellings	PI	10
Sigmoidoscopy and Upper G.I.endoscopy	PA/A/O	10
Vasectomy	PI/PA	5
Wound debridement	PI	10

General Surgical Operative Procedures

Procedure	**Category**	**Number**
Cysts and sinuses of the neck	PA	2
Gynaecomastia	PA	2
Drainage of breast abscess/Excision of breast lump	PI	10

Management of complex wounds	PI	10
Wide excision of breast tumours microdochectomy	PA	3
Mastectomy	PA/A	2
Parotidectomy	A	2
Thyroid lobectomy/Hemithyroidectomy	PA	3
Opening and closing the chest	PI	1
Opening and closing the abdomen	PI	5
Gastrostomy/feeding jejunostomy	PA	3
Cholecystectomy/laparoscopic cholecystectomy		
Release of bands and simple adhesive obstruction	PI	5
Closure of peptic ulcer perforation/under-running bleeding ulcer/ Vagotomy drainage	PI/PA	3
Colostomy	PA	2
Closure of Colostomy	PA	2
Laparotomy for abdominal trauma/splenectomy	PI/PA	5
Hemicolectomy	PA	1
Appendicectomy	PA/PI	10
Laparotomy for intestinal obstruction/bowel resections/bowel anastomosis	PI	3
Haemorrhoidectomy/Fissurectomy/Simple fistulectomy	PI/PA	10
Herniotomy/Orchidopexy in children	PA	3
Groin Hernia repair	PI	5
Diagnostic laparoscopy	PA	3
Ventilation	PI	5
UGIendoscopy/Flexible sigmoidoscopy[diagnostic and therapeutic]	A/O/PA	10

Speciality Procedures

Laparoscopy and GI Endoscopy

Procedure	**Category**	**Number**
Diagnostic and therapeutic Upper and Lower GI endoscopy	PA	10
Diagnostic laparoscopy	PA	3
Laparoscopic Cholecystectomy/Appendicectomy	A	5

Neurosurgery

Procedure	**Category**	**Number**
Craniotomy	A	2
Management of paraplegia	A	2
Peripheral nerve repair	A	2
Prevention of nerve injury-specific operations	A	2
Suturing complex scalp wounds	PI	2
Trephining	PA	2

Urology

Procedure	Category	Number
Carcinoma penis	PA/A	3
Circumcision	PI	5
Diagnostic cystoscopy	PA/A	3
Inguinal Block Dissection	PA	1
Meatotomy	PI	3
Nephrectomy-partial/total	A	3
Nephrolithotomy	A	3
Orchidectomy	PA/A	3
Orchidopexy	A	3
Retroperitoneal lymph node dissection	O	1
Supra pubic cystostomy	PI	3
Total amputation of penis	A	1
TUR/Open prostatectomy	A	5
Ureterolithotomy/URS	A	3
Urethral/Urogenital injuries	A	3
Urethral dilatation	PI	5
Varicocele	PA/A	3
Vasectomy	PI	5

Onco-Surgery

Procedure	Category	Number
All radical operations-Breast, Thyroid, GI and Facio-maxillary malignancies	A	2 Each
Wide excision of skin/soft tissue tumors	PI/PA	5
Functional neck node dissection	A	3
Gastrectomy/Bowel resection	A	3

Plastic & reconstructive surgery

Procedure	**Category**	**Number**
Burn resuscitation	PI	5
Lip surgery	A	5
Local blocks in anaesthesia	PI	10
Minor hand injuries	PI	5
Nerve repair	A	2
Post excision reconstruction	A	2
Re implantation of digits	O	1
Skin flap surgery	O	2
Split skin graft	PI	5
Tendon repair	PA	2
Wound debridement	PI	10

Paediatric surgery

Procedure	**Category**	**Number**
Anorectal anomalies	A	2
Circumcision/meatoplasty	PA	10
Herniotomy	PA	2
Intercostal aspiration	PI	2
Laparotomy for peritonitis	PA	5
Lymph node biopsy	PI	5
Non operative treatment of volvulus	A/O	2
Orchidopexy	PA/A	5
Ostomies	PA	2
Paediatric emergencies	A/PA	10
Pyloromyotomy	PA/A	5

Thoracic Surgery

Procedure	Category	Number
Canulation of artery and vein	A	2
Chest injuries	PA	5
Empyema drainage/Intercostal drainage	PI	10
Endotracheal intubation	PI	10
Lobectomies and pneumonectomies	O	2
Oesophageal surgery	O	2
Opening and closing the chest	PA	2
Pericardiectomy	O	2
Removal of FBs	A	2
Removal pulse generator (pacing)	PA/A	1
Rib resection	PA	2
Tracheostomy	PI	5
Undertake sternotomies	PA	2
Vein and arterial harvesting	PA/A	2
Ventilator management	PA	10
Thoracotomy/decortications	A/O	2

Vascular Surgery

Procedure	**Category**	**Number**
A V shunts for vascular access	PA	2
Conservative amputations	PI	5
Embolectomy	PA	2
Post-traumatic aneurysms	A	2
Use of heparin	PI	10
Varicose vein surgery	PI	5

Vascular suturing	PA	2
Vein graft	A/O	2
Vein patch repair	A/O	2

Soft skills:

- Presentation of cases examined, skills in explaining the patient the need of investigations, treatment required and other details.

- Communication with the patient, accompanying persons and explaining regarding progress or status of the patient

- Case paper writing, ordering investigations, ordering pre op work up, daily notes, and writing referral to other consultants etc

- Communication and acting as team member, leader and organizing the needful in emergencies. Interaction with other health care providers

- Explaining the need of surgery, its pros and cons and taking written informed consent.

- Breaking bad news, empathy with patients etc.

- Documentation of the procedures, proper communication and advise regarding care, follow up and prevention of complications for a patient who is being discharged.

Teaching and Learning Activities

A candidate pursuing the course should work in the institution as a full time student. No candidate should be permitted to run a clinic/nursing home while studying postgraduate course. Each year should be taken as a unit for the purpose of calculating attendance.
Every student shall attend teaching and learning activities during each year as prescribed by the department and not absent himself/herself from work without valid reasons.

A list of teaching and learning activities designed to facilitate students acquired essential knowledge and skills outlined is given below:

Lectures: Lectures should be employed for teaching certain topics. Lectures may be didactic or integrated.

- Didactic Lectures: Recommended for selected common topics for post graduate students of all specialties.
- Integrated Lectures and group discussions: These are recommended to be taken by multidisciplinary teams for selected topics, eg. Jaundice, Diabetes mellitus, thyroid disorders etc.
- Attendance and participation of Orientation programme and workshop regarding research methodology, literature search, synopsis and dissertation writing, biostatistics and basics of teaching skills, research ethics and other topics of common interest is compulsory.

Journal Club: Recommended to be held once a week. All the post graduate students are expected to attend and actively participate in discussion and enter in the Log Book relevant details. Further every candidate must make a presentation from the allotted journal(s) selected articles at least four times a year. The presentations would be evaluated using checklists. (See checklists in section IV). A time table with names of the student and the moderator should be announced well in advance.

Subject Seminar/Clinical seminar: Recommended to be held once a week. All the Post graduate students are expected to attend and actively participate in discussion and enter in the Log Book relevant details.
Further, every candidate must present on selected topics at least four times a year. The presentations would be evaluated using checklists (See checklist in Section IV). A timetable for the subject with names of the student and the moderator should be scheduled well in advance.

Ward Rounds: Ward rounds may be service or teaching rounds.

- Service Rounds: Postgraduate students and Interns should do every day for the care of the patients. Newly admitted patients should be worked up by the Postgraduates and presented to the seniors the following day.
- Teaching Rounds: Every unit should have 'grand rounds' for teaching purpose. A diary should be maintained for day to day activities by the students.
- Entries of (a) and (b) should be made in the Log book.

Clinical case discussions: Case presentations may be held weekly. Cases can be clinically interesting cases or problem based case discussions. Spotters and short case discussions can be conducted.

Ward procedures, basic surgical/ advanced surgical skills: These can be trained using the simulators, suturing knotting equipments, endotrainers etc in the Clinical skills laboratory. They can be assessed using the same facility.

Clinico Pathological Conference: Recommended at regular intervals for all post graduate students. Presentation should be done by rotation. If cases are not available due to lack of clinical postmortems, it could be supplemented by published CPC.

Death review meetings: Death review meetings should be held regularly once a month for objective discussion on the deaths. It is an important method of reflective learning. It improves patient care and system of service.

Group discussions: Group discussion is a good method of learning. It can be adopted in problem based case discussions, decision making and plan for complex situations. It trains the students in leadership skills, analysis of situation and problem solving approach.

Inter departmental Meetings/Integrated teaching:
Interdepartmental meetings should be held mainly with pathology, radiodiagnosis and anaesthesia at regular intervals. Interesting cases should be discussed and relevance of recent advances can be discussed.
Pathology: Regular surgical pathology sessions and quarterly clinico pathological conferences can be held.

Radiology: Adequate exposure to conventional radiology and training in modern imaging like Ultrasound, Doppler, CT scan MRI and angiography should be planned and done.

Anaesthesia: Regular interaction about Pre, Postoperative and ICU management along cardiopulmonary resuscitation should be done.

Teaching Skills:

Post graduate students must teach under graduate students (Eg. medical, nursing) by taking demonstrations, bed side clinics, tutorials, lectures etc. Assessment is made using a checklist by surgery faculty as well students. (See model check in Section IV). Record of their participation should be entered in Log book. Training of post graduate students in Educational Science and Technology is recommended.

Guest lectures: Guest lecture by eminent personalities, superspecialties, administrators and specialists in the concerned field should be arranged regularly.

Continuing Medical Education Programmes &Workshops

Recommended that at least 2 state level CME programmes and workshops should be attended by each student in 3 years.

Conferences: Attending conferences is compulsory. One state level conference and one national conference should be attended in 3 years.

Please note:

As per recent MCI guidelines every post graduate is required to present a poster, present oral presentation in national/state conference. He/she is also required to present one research publication which should be published/accepted for publication/sent for publication so as to be eligible for appearing final university examination. The guide is required to guide regarding these presentations.

The suggested teaching plan is proposed here for convenience. However it can be modified as per need.

P. G. Teaching Schedule (Month Wise)

DAY	WEEK-1	WEEK-2	WEEK-3	WEEK-4
Monday	Department Meeting	-	-	Mortality Meeting
Tuesday	Case Presentation **(LONG CASE – 1 PG)**	Case Presentation (**SHORT CASE – 2 PG)**	Problem Based Case Discussion **– 2 PGs**	Ward Rounds (**MODERATOR + 2 PGs**
Wednesday	Clinical Sub. Seminar	Clinical Sub. Seminar	Clinical Sub. Seminar	Pedagogy **(4 PGs)**
Thursday	3 PM To 4 PM Theory Classes	3 PM To 4 PM Theory Classes	3 PM To 4 PM Theory Classes	3 PM To 4 PM Theory Classes / Integrated Teaching Programme
Friday	Journal Club **(2 PGs)**	Group Discussion **(YEAR WISE)**	Journal Club **(2 PGs)**	**C.P.C**
Saturday				Activity at Clinical Skills Laboratory

Topics for training in clinical skills laboratory

- Basic Surgical Skills
- Central Venous Cauterization
- Endotracheal Intubation
- Cardiopulmonary Resuscitation
- Any appropriate skills not specified here.

Hand Eye Coordination using endotrainers.

- Ball Picking
- Rubber band adjustment from one point to other
- Endo clipping on Rubber band
- Onion pealing
- Cauliflower cutting
- Glove cutting
- Extra corporal knotting
- Intra corporal knotting
- Endo suturing
- Specimen extraction
- Wet lab sessions using animal tissue.

Rotation and posting in other departments:

The listed knowledge and skills are to be learnt over a period of 3 years. The process is a continuous one. However the recommended period and timing of training in basic subjects, allied departments and specialty departments is given below.

In the first year, student should work in the parent department. It is recommended that 2 years and 4 months are spent in General Surgery and 6 months in allied and specialty departments. Students must be 'on call' on a regular basis. The total duration of postings in core and other specialties will be eight months.

Basic Science

Basic science should be an essential part of training. It should be done as concurrent studies during the 1st year of training. At least 20 hours may be allotted in the first six months of the course for learning dissection skills. The theory component will be addressed through classes and integrated teaching sessions.

Allied Specialty Training

Students are posted to core allied specialty subjects Viz. Anaesthesia and ICU for one month and Orthopedics including trauma (Accident and emergency) for 1 month during the second year of training. Posting to the Department of Obstetrics and Gynecology for one month is optional. This posting may be in lieu of one of the other specialties (except the core specialties) depending on the choice of the candidate.

Other Surgical Speciality Subjects

Postings to other speciality departments will be during the second year. The departments and duration of postings are as under:

Department	Duration
▪ Cardiothoracic & Vascular surgery	4 weeks
▪ Neurosurgery	4weeks
▪ Urology	4 weeks
▪ Surgical Oncology	4 weeks

Postings in allied subjects

▪ Radiology	2weeks
▪ Anaesthesiology	2 weeks
▪ Orthopedics	2 weeks

Dissertation

Every candidate pursuing MD/MS degree course is required to carry out work on a selected research project under the guidance of a recognized post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.

The dissertation is aimed to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of a hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, comparison of results and drawing conclusions. The submission of synopsis, review and registration shall be in accordance of University regulations and time to time notifications of the University and institute. The contents and methodology are described in section I of this booklet.

Four copies of dissertation thus prepared shall be submitted to the Controller of Examinations six months before final examination on or before the dates notified by the University. Three copies should be submitted to the College.

The dissertation shall be valued by examiners appointed by the University. Approval of dissertation work is an essential precondition for a candidate to appear in the University examination.

Monitoring Learning Progress

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on participation of students in various teaching/learning activities. It may be structured and assessment be done using checklists that assess various aspects. Checklists are given in section IV.

The learning out comes to be assessed should included: (i)Personal Attitudes,(ii)Acquisition of Knowledge,(iii)Clinical and operative skills,(iv)Teaching skills and (v)Dissertation. Personal Attitudes.

The essential items are:

- Caring attitudes
- Initiative
- Organizational ability

- Potential to cope with stressful situations and undertake responsibility
- Trust worthiness and reliability
- To understand and communicate intelligible with patients and others
- To behave in a manner which establishes professional relationships with patients and colleagues.
- Ability to work in team
- A critical enquiring approach to the acquisition of knowledge.

The methods used mainly consist of observation. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers.

- **Journal Review Meeting (Journal Club):** the ability to do literature search, in depth study, presentation skills, and use of audio-visual aids are to be assessed. The assessment is made by faculty members and peers attending the meeting using a checklist (see Model Checklist-I, in section IV).
- **Seminars/Symposia**: The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio-visual aids are to be assessed using a checklist (see Model Checklist-II, section IV)
- **Clinico-Pathological conferences:** This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.
- **Group discussions**: This should be held once in a month or once in two months. Problem based case discussions, management strategies can be discussed where there will be a summarizer and there has to be logical conclusion. The team should be minimum of 6-8 up to 14 can be included. Moderator has to moderate and the students can be assessed by a preformed check list along with the group.
- Death review meetings/Mortality meetings: It should be held once a month. Deaths for the month can be discussed. It should reflect what was done and what could have been done. It should also avoid individual opinions. The student can present the case, however the discussion should be by faculty and concerned consultant/ unit should respond.

Attitude and communication skills: Even though these are learnt by accompanying the senior faculty, teaching formally by Role plays can be helpful. It can be assessed by observation of the student in their daily work or can be formally assessed by OSCE.

Basics of research methodology

Surgical research, computing and statistics, Surgical practice & Medico legal aspects, Ethics & surgical trials and Informed consent are to be taught in earlier part of course and assessed during ward work and dissertation work.

Clinical Operative skills

Day to Day work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills (see model Checklist III, section IV).

- Clinical meetings: Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list (see Model checklist IV, section IV).

- Clinical and Operative skills: The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the log book (Table No.3, section IV)

- Teaching skills: Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. Micro teaching/pedagogy can be adopted. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students (See Model checklist V, section IV).

- Dissertation in the Department: Periodic presentations are to be made in the department. Initially the topic selected is to be presented before submission to the University for registration, again before finalization for critical evaluation and another before final submission of the completed work (See Model Checklist VI & VII, section IV)

- Periodic tests: The departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practicals/clinicals and viva-voce. One of these tests shall have OSCE [objective structured clinical examination] format.

- The log book is a record of the important activities of the candidates during his training. Collectively, log books are a tool for the evaluation of the training programme of the institution by external agencies. The record includes academic activities as well as the presentations and procedures carried out by the candidate.

- Every candidate shall maintain a work diary/logbook and record his/her participation in the training programmes conducted by the department such as journal reviews, seminars etc. Log books should have details of the daily ward work, procedures performed, surgeries performed, assisted or observed. It can have the details of additional work like teaching done, attendance at guest lectures, CME, Conferences &Workshops etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.

- Log books and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University or MCI on request. Logbooks shall be submitted to the examiners at the time of University examinations.

- Format for the log book for the different activities is given in Tables, 1, 2 and 3 of section Copies may be made and used.

Procedure for defaulters: Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In

extreme cases of default the departmental committee may recommended that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

Scheme of Examination

i)Theory

There shall be four question papers, each of three hours duration.
The format of question paper will be

LONG ESSAYS:	2 [two] each carrying 20 marks	[20x2=40]
SHORT ESSAYS:	6 [six] each carrying 10 marks	[10x6=60]
TOTAL:	8 [eight] questions carrying	[100 marks]

Paper-I

Basic Sciences

History of surgery, applied Anatomy, Physiology Clinical Biochemistry, Microbiology & Pathology.Principles of oncology etc

Introduction to Surgery, Basic Surgical Principles. Wounds, tissue repair and scars. Critical care fluid, electrolyte and acid-base balance blood transfusion. Nutrition, Anaesthesia and pain relief. Wound infection, Special infections. Acquired immunodeficiency Syndrome (AIDS). Sterile precautions. Transplantation. Tumours, Cysts, Ulcers,Sinuses Fistula. Plastic and reconstructive surgery,skin lesions. Burns. Arterial disorders. Venous disorders. Lymphatic system. Day care surgery. Audit in surgery. Surgical ethics, Post-operative care.Bio medical waste.

Paper II

Neuro surgery ,head injuries and trauma to spine and nervous system. Disorders of cranium, skull and spine.soft tissue neoplasms, wrist hand and foot including congenital disorders. Face, Head & Neck, Endocrines, Eye and orbit. Cleft lip and palate, developmental abnormalities of the face, palate, jaws and teeth. Maxillofacial injuries. Nose and sinuses. Ear. Oral and oropharyngeal cancer and procancer. Salivary gland disorders. Pharynx,larynx and neck. Thyroid gland and the thyroglossal tract. Parathyroid and Adrenal glands. Breast. Thorax. Heart and Pericardium.

Musculoskeletal disorders, Fracture and Dislocations General and specific. Diseases of bones and joints, infections and tumours.

Paper III

Complete gastro intestinal tract, mesentry, liver, gall bladder, spleen, pancreas, hernias and umbilicus, abdominal wall. anastomoses, peritoneum, omentum, retroperitoneal space. Principles of Laparoscopic surgery.

Paper IV:

Genito-Urinary system: Urinary symptoms,Investigation of the urinary tract,anuria. Kidneys and ureters. Urinary bladder. Prostate and seminal vesicles. Urethra and penis. Testis and scrotum, paediatric surgery & **recent advances in surgery.**

Note: The distribution of chapters/topics shown against the papers are suggestive only.Recent advances may be asked in other papers also.There may be overlap of topics.

Clinical examination	**300 marks**
One long case	100
Two short cases	50+50=100
Two problem solving cases	20+ 20=40
Ward rounds three cases	20+20+20=60

Viva-Voce		**100 MARKS**
Instruments	-	15 marks
Pathology specimens	-	15 marks
X-rays	-	15 marks
Operative Surgery	-	15 marks
Logbook	-	10 marks
Tests	-	10 marks
Pedagogy	-	20 marks

Maximum marks for	**Theory**	**Practical**	**Viva**	**Grand Total**
	400	**300**	**100**	**800**

Recommended text books and Journals [Latest editions]

1. Charles V.Mann,R.C.G Russell, Norman S Williams. Bailey and Love's Short Practice of Surgery 26th Edition, 2008, Chapaman & Hall

2. David.C.Sabiston: Textbook of surgery: The biological basis of modern surgical practice of 19th Edition, 2007 W.B.Saunders.

3. Seymour.I.Schwarts,G.Tomshires,Frank.C.Spencer,Wendy Cowles,Husser; Principles of surgery, Vol 1 & 2,10th edition 2007, Mc. Graw Hill.

4. JSP Lumely; HamiltonBaileys physical signs, 18th Edition, 1997,Butterworth/Heinemann

5. R.W.H. McMinn: Lasts Anatomy: regional and applied 10th edition 1999 Churchill Livingstone.

6. Sir Charles Illingwortth,Bruce M.Dick,A Text Book of Surgical Pathology 12th edition 1979 Churchill Livingstone.

7. K.Das: Clinical Methods in Surgery, 8th edition, 2004, Suhas Kumar Dhar, Calcutta.

8. R F Rintoul. Farqaharsons 'Text Book of Operative surgery. 9th Edition 1995 Churchill
   Livingstone

9. Somen Das: A Practical Guide to Operative Surgery 6th Edition 1999,S.Das ,Calcutta

10. Pankaj Patel V.V.Dewoodkar, Handbooks of surgical Instruments for Undergraduates. 1992 Bhalani Publishing House.New Delhi.

11. R.A. Jamieson and A.W. Kay. Text book of Surgical Physiology, Churchill Livingstone.

12. James Kyle. Pye's Surgical Handicraft. Indian edition K.M. Varghese Company.

13. R.M. Kirk Surgery 5th edition.2006.

14. Frank Netter 's Anatomy . 3rdedition.

15. Text Book of Surgery, Associations of Surgeons of India, Edited by Ahmed-A-Hai,1stEdition.2002

16. Robert.H.Wilkins.Setti.S.Rangachary. Text book of Neurosurgery

17. Ashcraft, Holcomb and Murphy .Textbook of Peadiatric Surgery, 4th edition.

Reference Textbooks

1. William. F.Ganong;Review of Medical Physiology 2000 Lange Medical Publishers.
.
2. Roshan Lall Gupta ;Recent advances in Surgery (series) Jaypee Brothers

3. I.Taylor and C.D.Johnson;Recent Advances in surgery (series) Churchill Livingstone.

4. Lioyd.M.Nyhus Robert J.Baker and Joseph E.Fischer; Mastery of vol.1&2,6th edition 1997, Little Brown & Company.

5. Peter.J.Morris and Ronald.A Malt: Oxford Text Book of Surgery,vol1&2 Oxford University Press.-2nd edition.1994

6. Charles Rob and Rodney Smith: Operative Surgery, (All Volumes) 5th Edition 1971 Butterworths.

7. C.Palanivelu: Art of Laparoscopic Surgery 1999 Paras Publishing House.

8. Michael J.Zinner Symour I.Schwartz and Haroid Ellis: Maingot's Abdominal Operations vol 1 & 2, 12th Edition 2006 Prentice Hall International.

9. Kevin.G.Burnand and anatomy E.Young : The New Airds companion to Surgical Studies 1992. Churchill Livingstone.

10. Guyton: Text book of medical Physiology 11th Edition 1998, W.B.Saunders

11. Hamilton Bailey: Emergency Surgery 1999 Butterworth 13th Edition.

12. Cuschiery: Essentials of Surgical Practice 5th Edition 1995 K.M.Verghese Company.

13. Goligher: Surgery of the Anus, Rectum and Colon,-3rd Edition.

14. Yamada's Text Book of Gastroenterology-4th Edition,2003

15. Lee McGregor: Synopsis of surgical Anatomy, 12th (Indian) Edition,1998,K.M.Verghese Company

16. W.T.Irvine: Modern Trends in Surgery, [series,]Butterworths

17. Lee McGregor, Synopsis of Surgical Anatomy,12th Edition 1998, K.M.Verghese Company.

18. Irving Taylor, Timothy G.Cooke and Perra Guillou: Essential General Surgical Oncology, 1996, Churchill Livingston.

19. James A,O,Neil ,Marc I.Owe, Jay L.Grosfeld,Eric W.Fonkalsrud and Arnold G.Coran, Pediatric Surgery,vol.1 & 2

20. Anthony S.Fauci and Others: Harrison's Principles of Internal Medicine.

21. Sheila Sherlock and James Dooley:Diseases of the Liver and Biliary SystemBlackwell Scientific publication.

22. Vincent.J.Devita, Samuel Hellman and Steven A.Rosenberg,Cancer:Principles and practice of Oncology.

23. Blumgart:Surgery of Liver & Biliary Tract, vol I&II.

24. Campbell and Smith: Urology vol. 1, 2 & 3, 9th edition,

25. Smith: General Urology, 17thEdition.

26. M.D.Anderson's Surgical Oncology-Hand book-4th edition-2006.

27. Current Surgical Diagnosis and Treatment-2008- 13th edition.

28. Grabb & Smith Plastic Surgery-2007-6th Edition.

Journals for reference

1 Indian Journal of Surgery

2 British Journal of Surgery

3 American Journal of Surgery

4 Surgery International

5 New England Journal of Medicine

6 Year book of Surgery

7 Surgical Clinics of North America

8 Lancet

9 British Medical Journal

10 Indian Journal of Medical Research

11 Annals of Surgery

12 Journal of Surgical Education

SECTION - III

MEDICAL ETHICS & MEDICAL EDUCATION

Sensitization and Practice

Introduction

There is now a shift from the traditional individual patient, doctor relationship, and medical care. With the advances in science and technology and the needs of patient, their families and the community, there is an increased concern with the health of society. There is a shift to greater accountability to the society. Doctors and health professionals are confronted with many ethical problems. It is, therefore necessary to be prepared to deal with these problems. To accomplish the Goal (i), General Objectives (ii) stated in Chapter II (pages 2.1 to 2.3), and develop human values it is urged that **ethical sensitization** be achieved by lectures or discussion on ethical issues, clinical case discussion of cases with an important ethical component and by including ethical aspects in discussion in all case presentations, bedside rounds and academic postgraduate programs.

Course Contents

1. Introduction to Medical Ethics

   What is Ethics?
   What are values and norms?
   Relationship between being ethical and human fulfillment
   How to form a value system in one's personal and professional life
   Heteronymous Ethics and Autonomous Ethics
   Freedom and personal Responsibility

2. Definition of Medical Ethics
   Difference between medical ethics and bio-ethics
   Major Principles of Medical Ethics 0
   Beneficence = fraternity
   Justice = equality
   Self determination (autonomy) = liberty

3. Perspective of Medical Ethics
   The Hippocratic Oath
   The Declaration of Helsinki
   The WHO Declaration of Geneva
   International code of Medical Ethics (1993)
   Medical Council of India Code of Ethics

4. Ethics of the Individual
   The patient as a person
   The Right to be respected
   Truth and confidentiality
   The autonomy of decision
   The concept of disease, health and healing
   The Right to health
   Ethics of Behavior modification
   The Physician – Patient relationship
   Organ donation

5. The Ethics of Human life
   What is human life?
   Criteria for distinguishing the human and the non-human
   Reasons for respecting human life
   The beginning of human life
   Conception, contraception
   Abortion
   Prenatal sex-determination
   In vitro fertilization (IVF), Artificial Insemination by Husband (AIH)
   Artificial Insemination by Donor (AID)
   Surrogate motherhood, Semen Intra fallopian Transfer (SIFT),
   Gamete Intra fallopian Transfer (GIFT), Zygote Intra fallopian Transfer (ZIFT),
   Genetic Engineering

6. The family and society in Medical Ethics
   The Ethics of human sexuality
   Family Planning perspectives
   Prolongation of life
   Advanced life directives – The Living Will
   Euthanasia
   Cancer and Terminal Care

7. Profession Ethics
   Code of conduct
   Contract and confidentiality
   Charging of fees, Fee-splitting
   Prescription of drugs
   Over-investigating the patient

Low – Cost drugs, vitamins and tonics
Allocation of resources in health cares
Malpractice and Negligence

8. Research Ethics
   Animal and experimental research / humanness
   Human experimentation
   Human volunteer research – Informed Consent
   Drug trials\
   ICMR Guidelines for Ethical Conduct of Research – Human and Animal
   ICH / GCP Guidelines
   Schedule Y of the Drugs and Cosmetics Act.

9. Ethical work -up of cases
   Gathering all scientific factors
   Gathering all human factors
   Gathering value factors
   Identifying areas of value – conflict, setting of priorities,
   Working our criteria towards decisions

Recommended Reading

1. Francis C. M., **Medical Ethics**, 2nd Ed, 2004Jaypee Brothers, Bangalore/-
2. Ethical guidelines for biomedical research on human participants, ICMR publication 2006
3. Santosh Kumar: the elements of research, writing and editing 1994, Dept of Urology, JIPMER, Pondicherry
4. Srinivas D.K etal, Medical Education Principles and Practice, 1995, National Teacher Training Centre, JIPMER, Pondicherry
5. Indian National Science Academy, Guidelines for care and use of animals in scientific Research, New Delhi, 1994
6. International committee of Medical Journal Editors, Uniform requirements for manuscripts submitted to biomedical journals, N Engl G Med 1991
7. Kirkwood B.R, Essentials of Medical Statistics, 1st Ed.,Oxford: Blackwell Scientific Publications 1998
8. Mahajan B.K. Methods in bio statistics for medical students, 5th Ed, New Delhi, Jaypee, Brothers Medical Publishers, 1989
9. Raveendran, B. Gitanjali: A Practical approach to PG dissertation, New Delhi, Jaypee Publications, 1998.

10. John A Dent. Ronald M Harden, A Practical guide for medical teacher, 4th Edition, Churchill Livingstone, 2009.
11. Tejinder Singh Anshu, Principles of Assessment in Medical Education, Jaypee brothers
12. Dr. K.Lakshman, A Hand Book on Patient Safety, RGUHS & Association of Medical Consultants, 2012
13. Bernard Mogs, Communication skills in health & social care, 3rd Edition, (S) SAGE, 2015
14. Manoj Sharma , R. Lingyak Petosa, Measurement and Evalution for Health Educators, Jones & Bartlett Learning.
15. David E. Kern, Particia A, Thomas Mark T, Hughes, Curriculum Development for Medical Education. A six-step approach, The Johns Hopkins University press/Baltimore.
16. Tejinder Singh Piyush Gupta Daljit Singh, Principles of Medical Education (Indian Academy of Paediatrics), 4th Edition, Jaypee Brothers, 2013.
17. Robert Reid, Torri Ortiz Linenemann, Jessica L.Hagaman, Strategy Instruction for Students with learning disabilities, 2nd Edition, The Guilford Press London.
18. Lucinda Becker Pan Demicolo, Teaching in higher education, (S) SAGE, 2013.
19. C.N. Prabhakara, Essential Medical Education (Teachers Training), Mehta publishers.
20. Tejinder Singh Piyush Gupta, Principles of Evaluation & Research for health care programmes, 4th Edition, IAP National Publication House (Jaypee Brothers).
21. R.L.Bijlani, Medical Research, Jaypee Brothers, 2008
22. Stephen Polgar Shane A Thomas, Introduction to Research in the Health Sciences, Churchill Livingstone Elsevier, 2013.
23. Amar A,Sholapurkar. Publish & Flourish -A practical guide for effective scientific writing, Jaypee Brothers, 2011
24. Charles R.K.Hind, Communication Skills in Medicine, BMJ, 1997.

Section-IV

Format of Model Check Lists

Check List-I.

MODEL CHECK-LIST FOR EVALUATION OF JOURNAL REVIEW PRESENTATIONS

Name of the Student: _____

Name of the Faculty/Observer: _____ Date _____

Sl No	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Article chosen was					
2.	Extent of understanding of scope & objectives of the paper by the Candidate					
3.	Whether cross references have been consulted					
4.	Whether other relevant publications consulted					
5.	Ability to respond to questions on the paper/subject					
6.	Audio-Visual aids used					
7.	Ability to defend the paper					
8.	Clarity of presentation					
9.	Any other observation					
	Total Score					

Check list-II

MODEL CHECK-LIST FOR EVALUATION OF SEMINAR PRESENTATIONS

Name of the Student: _____

Name of the Faculty/Observer: _____ Date: _____

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Whether other relevant publications consulted					
2.	Whether cross references have been consulted					
3.	Completeness of Preparation					
4.	Clarity of Presentation					
5.	Understanding of subject					
6.	Ability to answer questions					
7.	Time scheduling					
8.	Appropriate use of Audio-Visual aids					
9.	Overall performance					
10.	Any other observation					
	Total Score					

Check List-III

MODEL CHECK LIST FOR EVALUATION OF CLINICAL WORK IN WARD /OPD

(To be completed once a month by respective Unit Heads including posting in other departments)

Name of the Student _____

Name of the Unit Head _____ Date: _____

Sl. No.	Points to be considered	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Regularity of attendance					
2.	Punctuality					
3.	Interaction with colleagues and supportive staff					
4.	Maintenance of case records					
5.	Presentation of cases during rounds					
6.	Investigations work up					
7.	Bedside manners					
8.	Rapport with patients					
9.	Counseling patient's relatives for blood donation or Postmortem and Case follow up or appropriate treatment					
10.	Overall quality of Ward work					
	Total Score					

Check List-IV

EVALUATION FORM FOR CLINICAL PRESENTATION

Name of the Student _____

Name of the Faculty _____ Date: _____

Sl No.	Points to be considered	Poor 0	Below Average 1	Average 2	Above Average 3	Very Good 4
1.	Completeness of history					
2.	Whether all relevant points elicited					
3.	Clarity of Presentation					
4.	Logical order					
5.	Mentioned all positive and negative points of importance					
6.	Accuracy of general physical examination					
7.	Whether all physical signs elicited correctly					
8.	Whether any major signs missed or misinterpreted					
9.	Diagnosis: Whether it follows logically from history and findings					
10.	Investigations required * Complete					
	*Relevant order					
	*Interpetation of investigations					
11.	Ability to react of questioning Whether it follows logically from history and findings					
12.	Ability to defend diagnosis					
13.	Ability to justify differential diagnosis					
14.	Others					
	Grand Total					

Check List-V

MODEL CHECK LIST FOR EVALUATION OF TEACHING SKILL PRACTICE

Sl. No.		Strong Point	Weak Point
1.	Communication of the purpose of the talk		
2.	Evokes audience interest in the subject		
3.	The introduction		
4.	The sequence of ideas		
5.	The use of practical examples and/or illustrations		
6.	Speaking style (enjoyable,monotonous,etc.,specify)		
7.	Attempts audience participation		
8.	Summary of the main points at the end		
9.	Asks questions		
10.	Answers questions asked by the audience		
11.	Rapport of speaker with his audience		
12.	Effectiveness of the talk		
13.	Uses A.V. aids appropriately		

Check List-VI

MODEL CHECK LIST FOR DISSERTATION PRESENTATION

Name of the Student: _____

Name of the Faculty: _____ Date: _____

Sl. No.	Points to be considered divine	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Interest shown in selecting a topic					
2.	Appropriate review of literature					
3.	Discussion with guide & other faculty					
4.	Quality of Protocol					
5.	Preparation of proforma					
	Total Score					

Check List-VII

CONTINUOUS EVALUATION OF DISSERTATION WORK BY GUIDE/CO-GUIDE

Name of the Student: _____

Name of the Faculty: _____ Date: _____

Sl. No.	Items for observation during presentations	Poor	Below Average	Average	Good	Very Good
1.	Periodic consultation with guide/co-guide					
2.	Regular collection of case material					
3.	Depth of analysis/discussion					
4.	Departmental presentation of findings					
5.	Quality of final output					
6.	Others					
	Total Score					

Check List-VIII

Model Checklists for Assessment of Scientific Papers for Publication

Sl. No.	Criteria	Distribution of Marks	Marks awarded
1.	Originality	10	
2.	Clarity & Quality of presentation	10	
3.	Relevance	10	
4.	Review of Literature	10	
5.	Quantum of works involved	15	
6.	Methodology, Sensitivity, Sample size, controlled, not Controlled study etc.,	25	
7.	Advancement of knowledge	10	
	Total	90	

Signature of the Evaluator _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Name _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Designation _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

MODEL CHECK LIST FOR ASSESSMENT OF PARTICIPATION IN GROUP DISCUSSION

Sl. No.	**Criteria**	**Distribution of Marks**	**Marks awarded**
1.	Originality of content	10	
2.	Clarity & Quality of presentation	10	
3.	Relevance and skills of application	20	
4.	Listens to others	10	
5.	Summarizes appropriately	15	
6.	Pro active Leadership qualities present	25	
7.	Advancement of knowledge	10	
	Total	100	

Signature of the Evaluator _ _ __ _ _ _ _ _ _ _ _ _ _ _ _

Name __ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Designation _ _ _ _ __ __ _ _ _ _ _ _ _ _ _

B.L.D.E. University's
SHRI B. M. PATIL MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTER,
VIJAYAPUR-586103 (KARNATAKA)

POSTGRADUATE LOG BOOK
FIRST YEAR

DEPARTMENT
OF
GENERAL SURGERY

B.L.D.E. University's
SHRI B. M. PATIL MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTER
VIJAYAPUR– 586103, KARNATAKA

Name of the Student :

Postgraduate Degree :

Academic Year :

Name and Designation of Guide :

Signature of the Student :

CERTIFICATE

Certified that the content of this Log-book is the bonafied work of Dr._____, a Postgraduate student of Department of General Surgery in B.L.D.E.U.'s Shri B. M. Patil Medical College, Hospital & R.C. Vijayapur for the academic year _____.

Signature, Name and seal of Guide	Signature, Name and seal of Professor & HOD.	Signature, Name and seal of Principal
Date:	Date:	Date:
Place:	Place:	Place:

1st YEAR POSTGRADUATE

a) Basic graduate skills

The student should have acquired certain skills during his Under-graduation and internship. These skills have to be reinforced at the beginning of the training periods. These skills include:

Procedure	Category	Number
Insertion of I.V. lines, Nasogastric tubes, Urinary catheters, etc.	PI	NA
Minor suturing and removal of sutures.	PI	NA
Removal of tubes and drains.	PI	NA
Routine wound dressings.	PI	NA

b) Ward Procedures

Ward work forms an important part of the training of surgeon. In addition to the routine examination of the patient with proper recording of findings, diligent practice of the following is recommended:

Procedure	Category	Number
Abdominal paracentesis including Diagnostic peritoneal lavage.	PI	5
Ability to teach UGs and interns.	PI	NA
Blood sampling – venous and arterial.	PI	NA
Communication skills with patients, relatives, colleagues and paramedical staff.	PI	NA
Ordering of the requisite laboratory and radiological investigations and interpretation of the report in light of the clinical picture.	PI	NA
Skills for Per-rectal examination and Proctoscopy.	PI	NA
Universal precautions against communicable diseases.	PI	NA
Venesection.	PI	5

c) ICU Procedures:

Procedure	Category	Number
Insertion of central venous line.	PI	10
Insertion of Peritoneal Dialysis Catheters.	A / PI	5
Tracheostomy.	PI	2
Working knowledge of Ventilators and Various Monitors.	PI	NA
Interpretation of Arterial Blood Gases.	PI	NA
Correction of Electrolyte disturbances.	PI	NA
Prescribing Parenteral & Enteral nutrition.	PI	NA

d) Emergency Room Procedures:

Procedure	Category	Number
Application of Splints for Fractures.	PI	NA
Arterial and Venous lines.	PI	NA
Assessment of early management of Polytrauma.	PI	NA
Cardio-pulmonary Resuscitation.	PI	NA
Management of Airway Obstruction.	PI	NA
Management of Shock and Cardiac / Respiratory failure.	PI	NA
Recognition and initial management of Surgical Emergencies.	PI	NA
Suturing Techniques.	PI	NA

e) Pre-operative Workup:

Procedure	Category	Number
Ability for adequate pre-operative preparation in special situations like Diabetes, Renal failure, Cardiac and Respiratory failure, etc., and risk stratification.	PI	NA
Communication with special reference to obtaining Informed Consent.	PI	NA
Proper pre-operative assessment and preparation of patients including DVT Prophylaxis, Blood transfusion and Antibiotics.	PI	NA

f) Post-operative Care

Procedure	Category	Number
Airway management.	PI	NA
Basic physiotherapy.	PI	NA
Management of epidural analgesia.	PI	NA
Management of Fistulae.	PI	NA
Management of post-operative hypo and hypertension.	PI	NA
Post-operative pain control.	PI	NA
Skills for Nutritional rehabilitation of patients.	PI	NA
Skills for proper Fluid & Antibiotic management.	PI	NA
Stoma care.	PI	NA

g) Minor O.T. Procedures:

Procedure	Category	Number
Circumcision under local anesthesia.	PI	5
Drainage of abscess.	PI	5
FNAC.	PI	5

Major dressings.	PI	20
Minor biopsies – Lymph node, Ulcer, Swellings, etc.	PI	20
Removal of simple subcutaneous swellings.	PI	10
Suturing techniques.	PI	20
Vasectomy.	PI / PA	5
Wound debridement.	PI	10

h) Major Operating Room techniques:

Procedure	Category	Number
Instrument arrangement and trolley layout.	PA	NA
Skills in sterilization techniques, O.T. layout and asepsis.	O	NA
Skin preparation – painting and draping.	PI	NA
Techniques of scrubbing and gowning.	PI	NA

i) General Surgical Procedures:

Procedure	Category	Number
Appendicetomy.	PA	10
Drainage of Breast abscess / Excision of Breast Lump.	PI	10
Haemorrhoidectomy / Fissurectomy / Simple Fistulectomy.	PA/PI	10
Management of complex wounds. and debridement	PI	10
Opening and closing of abdomen.	A/PA	5

j) Plastic Surgery:

Procedure	Category	Number
Burn resuscitation and dressings	PA/PI	10
Local blocks in anesthesia.	PI	10
Stitch craft.	PI	NA
Wound debridement.	PI	10

k) Cardiothoracic Surgery:

Procedure	Category	Number
Endotarcheal intubation.	PI	10
Intercostal drainage.	PI	5
Ventilator management.	PA	10

LOG BOOK

Table – 1: Academic presentations made by the student.

Name:

Admission year:

Date	Topic	Type of Presentation – Seminar, Journal Club, Case presentation, UG teaching, etc.	Signature of the Moderator

Table – 2: Academic activities attended by the student.

Name:
Admission year:

Date	Type of Presentation	Moderator Name		Signature of the Moderator
		Student		

Table – 3:

Diagnostic and operative procedures performed.

Name:
Admission year:

Date	Pts. Name	I.P. No.	Procedure	Category O, A, PA, PI*

***KEY**

O - Washed up and observed.
A - Assisted a more senior.
PA - Performed procedure under the direct supervision of a senior surgeon.
PI - Performed independently

Table – 4: Daily activities done by the student.

Name:
Admission year:

Date	Activities	Signature of the Moderator

Model Overall Assessment Sheet

Name of the student:
Year of admission;
Academic Year:

Sl. No.	Guide, Unit Faculty, senior PG, Support Staff, HOD,	Name of Student and Mean Score					
		A	B	C	D	E	F
1.							
2.							
3.							
4.							
5.							
	Total Score						

B.L.D.E. University's
SHRI B. M. PATIL MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTER, VIJAYAPUR-586103 (KARNATAKA)

POSTGRADUATE LOG BOOK
SECOND YEAR

DEPARTMENT
OF
GENERAL SURGERY

B.L.D.E. University's
SHRI B. M. PATIL MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTER
VIJAYAPUR– 586103, KARNATAKA

Name of the Student :

Postgraduate Degree :

Academic Year :

Name and Designation of Guide :

Signature of the Student :

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Signature, Name and seal of Guide.	Signature, Name and seal of Professor & HOD.	Signature, Name and seal of Principal
Date:	Date:	Date:
Place:	Place:	Place:

2nd YEAR POSTGRADUATE

a) Ward Procedures

Ward work forms an important part of the training of surgeon. In addition to the routine examination of the patient with proper recording of findings, diligent practice of the following is recommended:

Procedure	Category	Number
Burns dressing	PI	10
Thoracocentesis	PI	5
Venesection	PI	5

b) ICU Procedures:

Procedure	Category	Number
Insertion of arterial lines	PI	10
Insertion of Endotracheal tubes	PI	10
Insertion of Peritoneal Dialysis Catheters	A/PA	5
Intercostal Drainage	PI	5
Suprapubic Puncture / Stab Cystostomy	PI	5

c) Minor O. T. procedures:

Procedure	Category	Number
Reduction and plaster application of simple Fractures and Dislocations	PA	5
Sigmoidoscopy and Upper G.I. endoscopy (preferable in an endoscopy room)	PA/A/O	10

d) General Surgical operative Procedures:

Procedure	Category	Number
Groin Hernia repair	PI	5
Release of bands and simple adhesive obstructions	PI	5
UGI endoscopy / Flexible Sigmoidoscopy	A/O	10
Artificial Ventilation	PI	5

e) Neurosurgery:

Procedure	Category	Number
Craniotomy	A	2
Management of paraplegia	A	2
Peripheral nerve repair	A	2
Prevention of nerve injury – specific operations	A	2
Suturing complex scalp wounds	PI	2
Trephining	PA	2

f) Plastic Surgery:

Procedure	Category	Number
Lip surgery	A	5
Minor hand injuries (specify)	PI	5
Nerve repair	A	2
Post excision reconstruction	A	2
Re implantation of digits	O	NA
Skin flap surgery	O	2
Split thickness skin grafts	PI	3
Tendon repair	PA	2

g) Oncology:

Procedure	Category	Number
All radical operations – Breast, Thyroid, GI and Facio-maxillary malignancies	A	2 each
Breast lumpectomy	PI	5
Functional neck node dissection	A	3
Gastrectomy / Bowel resection	A	3
Imprint cytology	PA	3
Metastatic workup	PA	5
Stoma care	PI	5
Thyroid surgery	A	5
U/S guided biopsy	A/O	3

h) Urology:

Procedure	Category	Number
Carcinoma penis	PA/A	3
Diagnostic cystoscopy	PA/A	3
Inguinal block dissection	PA	1
Meatotomy	PI	3
Nephrectomy – partial / total	A	3
Nephrolithotomy	A	3
Orchidectomy	PA/A	3
Orchidoplexy	A	3
Retroperitoneal lymph node dissection	O	1
Suprapubic cystostomy	PI	3
Total amputation of penis	A	1
TUR / Open prostatectomy	A	5
Ureterolithotomy	A	3
Uretheral / Urogenital injuries	A	3
Uretheral dilatation	PI	5
Varicocoele	PA/A	3
Vasectomy	PI	10

i) Paediatric Surgery:

Procedure	Category	Number
Anorectal anomalies	A	2
Circumscision / Meatoplasty	PA	10
Herniotomy	PA	2
Intercostal aspiration	PI	2
Laparotomy for peritonitis	PA	5
Lymph node biopsy	PI	5
Non-operative treatment of volvulus	A/O	2
Orchidoplexy	PA/A	5
Ostomies	PA	2
Paediatric emergencies	A/PA	10
Pyloromyotomy	PA/A	5

j) Cardiothoracic Surgery:

Procedure	Category	Number
Canulation of artery and vein	A	2
Chest injuries	PA	5
Empyema drainage / decortications	PI	2
ICU duties	PI	NA
Lobectomies and pneumonectomies	O	2
Oesophageal surgery	O	2
Opening and closing of chest	PA	2
Pericardiectomy	O	2
Removal of FBs	A	2
Remove pulse generator (pacing)	PA/A	1
Rib resection	PA	2
Tracheostomy	PI	5
Undertake sternotomies	PA	2
Vein and arterial harvesting	PA/A	2

k) Vascular Surgery:

Procedure	Category	Number
A V shunt for vascular access	PA	2
Bypass graft – prosthetic	A	2
Conservative amputations	PI	5
Embolectomy	PA	2
Post-traumatic aneurysms	A	2
Sympathectomy	PA	2
Use of Heparin	PI	10
Varicose vein surgery	PI	2
Vascular suturing	PA	2
Vein graft	A/O	2
Vein patch repair	A/O	2

Table – 1:

Academic presentations made by the student.

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Name:
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Table – 4:
Daily activities done by the student

Name:
Admission year:

Date	Activities	Sign

Model Overall Assessment Sheet

Name:
Academic Year:

Sl. No.	Faculty Member & Others	Name of Student and Mean Score					
		A	B	C	D	E	F
1.							
2.							
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B.L.D.E. University's
SHRI B. M. PATIL MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTER, VIJAYAPUR-586103 (KARNATAKA)

POSTGRADUATE LOG BOOK
THIRD YEAR

DEPARTMENT
OF
GENERAL SURGERY

B.L.D.E. University's
SHRI B. M. PATIL MEDICAL COLLEGE HOSPITAL AND RESEARCH CENTER
VIJAYAPUR– 586103, KARNATAKA

Name of the Student :

Postgraduate Degree :

Academic Year :

Name and Designation of Guide :

Signature of the Student :

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Date: Place:	Date: Place:	Date: Place:

3rd YEAR POSTGRADUATE

Apart from routine ward and operative work, the following need proficiency

Minor O. T. procedures:

Procedure	Category	Number
Minor anorectal procedures (Haemorrhoids – Banding, Cryotherapy, Suturing, etc; Anal dilatations and Fistulectomy	PI	10

Laparoscopic and GI Endoscopy:

Procedure	Category	Number
Diagnostic and therapeutic Upper and Lower GI endoscopy	PA	10
Diagnostic laparoscopy	PA	3
Laparoscopic cholecystectomy	A	3

General Surgical operative Procedures:

Procedure	Category	Number
Appendicectomy	PI	5
Cholecystectomy	PI and PA	1 and 3
Closure of Colostomy	PA	2
Closure of Peptic ulcer / Under-running bleeding ulcer / Vagotomy & drainage	PI	3
Colostomy	PA	2
Cysts and sinuses of neck	PA	2
Diagnostic laparoscopy	PA	3
Groin Hernia repair	PI	5
Gynaecomastia	PA	2
Haemorrhoidectomy / Fissurectomy / Simple Fistulectomy	See minor OT procedures	
Hemicolectomy	PA	1
Herniotomy / Orchidoplexy in children	PA	3
Laparotomy for abdominal trauma / Splenectomy	PI	3
Laparotomy for intestinal obstruction / bowel resection / bowel anastomosis	PI	3
Mastectomy	PA/A	2
Opening and closing of chest	PI	1
Parotidectomy	A	2
Thyroid lobectomy	PA	3
UGI endoscopy / Flexible sigmoidoscopy	A/O	10
Wide excision of breast tumours / mastectomy /	PA	3

microdochectomy		
Gastrostomy / Feeding jejunostomy	PA	3

Paediatric Surgery:

Procedure	Category	Number
Herniotomy	PA	2
Lymph node biopsy	PI	5
Pyloromyotomy	PA/A	5

Urology:

Procedure	Category	Number
Retroperitoneal lymph node dissection	O	1
Vasectomy	PI	10

Cardiothoracic Surgery:

Procedure	Category	Number
Chest injuries	PA	5
ICU duties	PI	NA
Oesophageal surgery	O	2
Removal of FBs	A	2
Rib resection	PA	2
Tracheostomy	PI	5
Undertake sternotomies	PA	2
Vein and arterial harvesting	PA/A	2

Vascular Surgery:

Procedure	Category	Number
A V shunt for vascular access	PA	2
Bypass graft – prosthetic	A	2
Conservative amputations	PI	5
Embolectomy	PA	2
Post-traumatic aneurysms	A	2
Sympathectomy	PA	2
Use of Heparin	PI	10
Varicose vein surgery	PI	2
Vascular suturing	PA	2
Vein graft	A/O	2
Vein patch repair	A/O	2

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REGISTRAR
BLDE (Deemed to be University)
Vijayapura-586103. Karnataka