



BLDE UNIVERSITY

PG CURRICULUM 2016-17

MD Forensic Medicine and Toxicology

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

Smt. Bangaramma Sajjan Campus, B. M. Patil Road (Sholapur Road), Vijayapura - 586103, Karnataka, India.

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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 Principal
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

Smt. Bangaramma Sajjan Campus, Sholapur Road, Vijayapura - 586103, Karnataka, India.

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.

Eligibility 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 outcomes 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
- Trustworthiness 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

GOALS

The postgraduate course **M.D. forensic medicine and toxicology** should enable a medical graduate to become a competent specialist, acquire knowledge and skills in educational technology for teaching medical, dental and health sciences, serve as expert in the medico-legal field and conduct research in bio-medical science.

Specific learning objectives:

FORENSIC PATHOLOGY

Should be able to:

1. Perform autopsy, describe and interpret the findings and draft report on an adult body, fetus and mutilated bodies/skeletal remains.
2. Collect, preserve, pack, label and dispatch the viscera to FSL in suspected poisoning cases.

Should be able to:

Describe, interpret and opine on the following:

- a) Slides.
- b) Soft specimens
- c) Photographs
- d) Weapon of assault
- e) Instruments/appliances.

EXPERT OPINION

Should be able to interpret and give opinion on Medico-legal matters referred.

Should be able to give evidence in an elegant manner and defend his case in the court of law, when summoned.

CLINICAL FORENSIC MEDICINE

Clinical:

Should be able to:

Examine, describe and interpret the findings and opine in the following cases:

- a) Poisoning
- b) Drunkenness
- c) Accused/Victim in cases of sexual assault.

- d) Injury cases.
- e) Determination of age by physical and radiological examination.
- f) Microscopic and chemical tests for blood and semen stains/sample.

Laboratory:

Should be able to perform the following tests:

Microscopic and chemical tests for blood and semen stains/sample.

FORENSIC TOXICOLOGY

Toxicology:

Identify the specimen; describe the clinical features and management of poisoning.

TEACHING

Should be able to take lectures, demonstrate practical exercises for undergraduate students.

SPECIALITY POSTINGS

At the end of specialty postings in each discipline, the student should be able to fulfill the objectives, which are stated for each department

POST GRADUATE TRAINING

The course is of three years duration, organized in six terms of six month duration each. This pattern is only a guideline to the department to organize training schedule, subject to modification depending up on the workload and academic assignments of the department.

First term:

- A. Orientation programme
- B. Basic autopsy skill (by witnessing)
- C. Attending all the undergraduate classes taken by all the faculty
- D. Self-directed learning (allowing full freedom to learn at their own pace)
- E. Discussions on autopsy conducted
- F. Preparation of Dissertation synopsis and submission to the university

Second term and Third term:

- A. Postings to other departments with objectives clearly stated
- B. Continuation of dissertation work
- C. Regular fortnightly seminars, Journal article presentation and autopsy case presentation
- D. Organized teaching

- E. Conducting the autopsies but reports signed by the concerned staff
- F. Seminars, Journal article presentations, case presentations
- G. Attending to the court to witness evidence given by the staff summoned

Fourth, Fifth & Sixth term:

- A. Seminars, Journal article presentations, case presentations
- B. Autopsy work
- C. Dissertation work progression and finalization
- D. Assessment of the overall performance
- E. Periodic mock examinations
- F. Conduct of undergraduate tutorials and practicals to enhance teaching ability

Specialty postings:

Anatomy – 15 days

Learning objectives:

- A. Acquire knowledge of human anatomy with emphasis on brain, bones & Heart
- B. Identify normal histology of heart, liver, lung, kidney, spleen & adrenals.
- C. Fetal circulation

Pathology- 1 month

Learning objectives:

- A. Description of the gross specimens of various organs.
- B. Tissue processing & sectioning.
- C. Staining techniques
- D. Description of microscopic appearance. Normal, diseases, Trauma.

Casualty- 2months

Learning objectives:

- A. Basics of life saving measures.
- B. Making a case Medico-legal.
- C. Description of various wounds.
- D. Issue of wound certificate.
- E. Maintenance of Medico legal documents.

Obstetrics and Gynecology - 15 days

Learning objectives:

- A. Clinical methods of examination of genitalia.
- B. Clinical examination for evidence of pregnancy.
- C. Abortion & its Medico legal implications.
- D. Recent signs of Pregnancy, Abortion & delivery.
- E. Artificial insemination.

Psychiatry-15 days

Learning objectives:

- A. Mental Health Act.
- B. Clinical signs of mental illness
- C. Classification of mental illness.
- D. True & feigned insanity.
- E. Interpretation of Mc Naughten's rule.
- F. Mental status examination.

Microbiology-15 days

Learning objectives:

- A. Basics of staining techniques.

Oral Medicine and Radiology – 15 days

- B. Gain knowledge about anatomy of teeth (Both temporary and permanent).
- C. Acquire the knowledge of interpreting OPG.
- D. Acquire the skill of documenting the dental findings.

Forensic Science

Posting at RFSL Belgaum- 15 days

Learning objectives:

- A. Analysis of poisons.
- B. HPLC & Chromatography
- C. Narco analysis
- D. DNA fingerprinting.
- E. Dactylography.
- F. Internal & External ballistics.

Scheme of examination

Theory

Preparatory exam shall be of four papers of 100 marks each similar to University exam.

University exam

Four papers of 100 mark each. Each paper comprises - 2 long essays of 20 mark each, 6 short essays of 10 mark each.

1. Paper one=Basic medical sciences of medico legal significance
2. Paper two=Forensic Pathology
3. Paper three=Forensic Toxicology & Psychiatry
4. Paper four=Medical Ethics & Law, Recent advances.

Practical

Preparatory Practical examination shall be conducted by four examiners from the department teaching staff as per university exam pattern.

PRACTICAL EXAMINATION - SYLLABUS

1. Basic Human Anatomy (Gross and Histological), Physiology, Clinical biochemistry in relation to Forensic Medicine.
2. Basic Pathology and Microbiology (Clinical Pathology, Hematology, Histopathology: Tissue processing and staining techniques – Routine and Special, Museum Technology, Blood Bank, etc.) in relation to Forensic Medicine.
3. Medico legal Postmortem Examination: Adult and Foetal (Routine and Special Techniques).
4. Forensic Osteology: Examination and reporting on Skeletal Remains.
5. Forensic Radiology: Examination of Radiographs for Expert Opinion.
6. Determination of Age by Physical and Dental Examination.
7. Wound Examination and issuing Wound Certificate.
8. Examination and Certifying Cases of Impotency, Pregnancy, Delivery etc.
9. Examination and Opinion on Sexual Offences cases, such as rape, Sodomy etc.
10. Examination of cases for Drunkenness Certification.
11. Expert opinion on Referred Medico legal cases.
12. Setting up and maintaining Forensic Medicine Dept.
13. Reporting and discussion on Poisons.
14. Reporting and discussion on mounted Soft Specimens of Medico legal Importance.
15. Reporting on Autopsy Instruments and appliances.
16. Reporting on the Weapons of alleged assault.
17. Micro-teaching.

University practical Exam pattern including viva voce

Max Marks: 400

Day 1 Marks

First half

- Medico legal autopsy Protocol 20
- Medico legal autopsy External examination 30
- Medico legal autopsy internal examination 50

Day 1 Second half

- Preservation of viscera / body fluids/ stains etc 20
- Examination & opinion as to examination of body parts /skeletal remains 40
- Examination of set of poisons 20
- Examination of weapons & opinion 20

Day 2

First half (Clinical Forensic medicine)

- Examination, treatment & reporting of Poison case 20
- Examination and issue of Medico legal injury report. 20
- Examination and certification as to Drunkenness 20
- Examination and certification as to accused / victim of sexual assault 20
- Age estimation by subject 20

II half [viva voce]

- Pedagogy 20
- Grand viva 80

RECOMMENDED TEXT BOOKS & REFERENCE BOOKS:

Sl No	Book title	Author	Publisher	Edition
1	Forensic Medicine & Toxicology volume I & II	J B Mukherjee	Academic Publishers Kolkata	3 rd edition
2	Text book of Medical Jurisprudence & Toxicology	C K Parikh	CBS Publishers New delhi	6 th edition
3	Essentials of Forensic Medicine & Toxicology	K S Narayana reddy	Medical book company Hyderabad	29 th edition
4	Modi's text book of medical Jurisprudence & Toxicology	Mathiharan	Lexis Nexis, Tripathi Publication (ND)	22ed
5	Cox's Medical Jurisprudence & Toxicology.	---	---	1 st
6	Bernard Knight et.all : Cox's Medical Jurisprudence & Toxicology.	Bernard Knight et.all	---	1st
7	Russel S.Fisher & Charles S. Petty: Forensic Pathology.		CRC, Press	---
8	Keith Simpson's Forensic Medicine.	Jason Payne James Richards Jones	HODDER ARNOLD UK COMPANY	13 th edition
9	Principles of .A.Nandy.	Apurba Nandy	New Central Book Agency LTD	
10	Textbook of Forensic Medicine and Toxicology	Nageshkumar G Rao	JAYPEE BROTHERS NEW DELHI	2 nd edition
11	The essentials of Forensic Medicine.	Polson C.J. :	Tailore Francis, Google book	5 th 2014
12	Legal Medicine, Bristol Wright.	Camps F.E.Gradwohls-	Abebooks	3 rd 1968
13	A Doctors guide to Court.	Simpson's :	Amazon	2 nd 1967

14	The pathology of Homicide.	Adelson L. :	Charles C Thomas, Amazon	1 st 1974
15	Atlas of Legal Medicine :	Tomio Watanabe.	Lippicot, Amazon	3 rd 1975
16	Medici Legal Investigation of Death.	Spitz W.U& Fisher R.S. ,	Charles C Thomas, Amazon	4 th 2016
17	Principles & practice of Medical Jurisprudence .Churchil Lvng.	Taylor's. A.Keith Mant ,	Churchill, Google book	7 th 1920
18	The Indian Penal Code.	Justice Hidayatullah & V.R.Manohar , Ratanlal & Dhirajlal:	Lexis Nexis (New Delhi), Amazon	34 th 2015
19	The Code of Crm.Procdr.	Justice Hidayatullah & S.P.Sathe : Ratanlal & Dhirajlal ;	Lexis Nexis (New Delhi), Amazon	21 st 2013
20	The Law of Evidence.	Justice Hidayatullah & V.R.Manohar , Ratanlal & Dhirajlal	Lexis Nexis (New Delhi), Amazon	24 th 2011
21	Medical Law & Ethics in India.	H.S.Mehata	Macmillan, Amazon	1965
22	Bernard Knight; Forensic Pathology.	Pekka Saukko Bernard Knight	HODDER ARNOLD UK COMPANY	3 rd edition
23	Code of Medical Ethics, Medical Council of India, approved by Central Govt. U/S 33(m) of IMC Act 1956 (Oct. 1970).	---	---	---
24	The Human Skeleton in Legal Medicine.	Krogman W.M.	Charles C Thomas, Amazon	2 nd 1986
25	F.E.Camps, J.M.Cameren, David Lanham: Practical Forensic Medicine.	---	Hutchinson Medical Publishers, Amazon	1956
26	Modern Medical Toxicology.	VV Pillay	JAYPEE BROTHERS New Delhi	3 rd edition
27	Textbook of Forensic Medicine & Toxicology, Principles & Practice.	Krishan Vij	ELSEVIER	5 th edition
28	Textbook of Forensic	Dr.B.V.Subrahmanyam	CBS, Amazon	1 st 2008

	Medicine & Toxicology.			
29	Handbook of Forensic Pathology.	Vincent J.M. Di Maio & Suzzanna E. Dana :	CRC Press, Amazon	2 nd 2006
30	The Medical Profession & Law	Dr.R.D.Lele	(IHA, Mumbai Publication). Google book	2 nd 1993
31	Forensic Medicine & Toxicology , Oral , Practical & Mcq.	R.N.Karmarkar	Academic Publishers Kolkata	3 rd edition
32	Forensic Medicine.	P V GUHRAJ	Universities press	2 nd edition
33	Forensic Medicine.	Gordon & Shapiro	---	---
34	Pediatric Forensic Medicine & Pathology,	J.K.Mason	Chopraman & Hall Medical.	1 st
35	Forensic Medicine & Pathology,	J.K.Mason	Chopraman & Hall Medical.	1st
36	Forensic Medicine	B. Umadethan	CBS Publishers	New edition
37	Forensic Medicine. Physical Trauma.Vol.1, 2.3.	C.G.Tedeshi	W.B.Saunders Company, Amazon	1977
38	Gradwohl's Legal Medicine.	Francis C.J.Mehata	J Wright, Amazon, Google book	3 rd 1976
39	Pathology Of Trauma	Allen Moritz	Lear Febiger, Amazon	1 st 1942
40	Principles of Forensic Medicine & Toxicology	Rajesh Bardale	JAYPEE BROTHERS New Delhi	New edition
41	Medical Ethics.	Francis C.M.	J.P.Publications , Bangalore	2 nd 2007

RECOMMENDED JOURNALS

1. Journal of Forensic Sciences.
2. Journal of Legal Medicine (Of American College Medicine.).
3. Journal of Forensic Science Society.
4. Medico-legal Journal.
5. American Journal of Law & Medicine.
6. American Journal of Forensic Medicine.
7. Forensic Science International.
8. Journal of Clinical Forensic Medicine.
9. Medicine Science & Law.
10. Science & Justice.
11. Journal of Indian Academy of Forensic Medicine.
12. Journal of Forensic Medicine & Toxicology, (Medico-legal Society.)
13. Medico-legal Update, An International Journal.
14. Journal of Clinical Forensic Medicine.
15. Journal of Medico-legal Association of Maharashtra.
16. Journal of Karnataka Medico-legal Society.

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

Heteronomous 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 Evaluation for Health Educators, Jones & Bartlett Learning.
15. David E. Kern, Patricia 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

Check List – I
MODEL CHECK-LIST FOR EVALUATION OF JOURNAL
REVIEW PRESENTATIONS

Name of the Student:**Name of the Faculty/Observer:****Date:****Title and author****Source**

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
REVIEW PRESENTATIONS

Name of the student: _____ **Name of the Faculty/Observer:** _____

Date:

Topic

Guide

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 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 AV aids appropriately		

Check List-IV
MODEL CHECK LIST FOR DISSERTATION PRESENTION

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					
6.	Title <ul style="list-style-type: none"> • Appropriateness • Clarity and brevity • Focus on topic 					
7.	Introduction <ul style="list-style-type: none"> • Purpose of study • Mention of lacuna • Hypothesis, if any 					
8.	Review of literature <ul style="list-style-type: none"> • Relevance • Completeness • Is up to date? 					
9.	Methods <ul style="list-style-type: none"> • Mention type of study • Details of subjects & control • Details of material • Procedure for data collection • Statistical methods employed • Mention ethical issues 					
	Total Score					

Check List-V
**CONTINUOUS EVALUATION OF DISSERTATION WORK BY GUIDE / CO-
GUIDE**

Name of the Student:

Name of the Faculty:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
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-VI

MODEL CHECK LIST FOR AUTOPSY TECHNIQUES/TEST

Name of the Student:

Name of the Faculty:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Analysis of history & clinical presentation					
2.	Quality of Grossing/ Dissection					
3.	Quality of report writing skills					
4.	Depth of analysis / discussion					
5.	Diagnosis					
6.	Quality of final output					
7.	Others					
	Total Score					

