



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION AND RESEARCH

(A Deemed to be University Declared under Section 3 of UGC Act, 1956)

Comprising Sri DevarajUrs Medical College

[Constituent Unit of Sri DevarajUrs Educational Trust for Backward Classes (Regd.)]

TAMAKA, KOLAR-563103, KARNATAKA, INDIA

Ph: 08152-243009, +91 9448395232 Fax: +918152 - 243008 E-mail: registrar@sduu.ac.in/office@sduu.ac.in. Website: www.sduu.ac.in

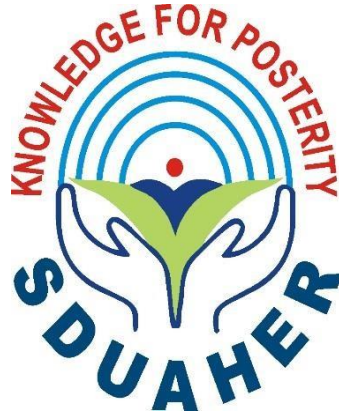
(With effect from 2019-2020 batches)

Competency Based Postgraduate Curriculum for Doctor of Medicine Forensic Medicine


Dean Faculty Of Medicine
Sri Devaraj Urs Academy of Higher
Education & Research, Tamaka, Kolar.

Approved as per BOM-56-2019, (Resolution No-LVI.06) Dated-20/12/2019

REGULATIONS GOVERNING
POST GRADUATE DEGREE PROGRAMMES
CURRICULUM 2019-2020

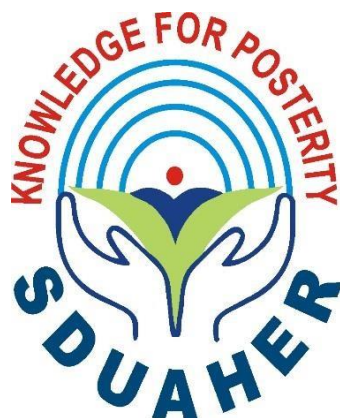


**SRI DEVARAJ URS ACADEMY OF HIGHER
EDUCATION AND RESEARCH**

Comprising Sri Devaraj Urs Medical College
A Deemed To Be University

Declared under section 3 of UGC, Act,1956,
MHRD GOI NO.F,9-36/2006-U.3(A), Dt.25th may 2007
Post box No.62, Tamaka, Kolar-563101, Karnataka, INDIA
Ph:08152-210604,210605,243244:: Fax:08152-243008
Website: www.sduu.ac.in, Email:office@sduu.ac.in/ registrar@sduu.ac.in

REGULATIONS AND CURRICULA
FOR
POST GRADUATE DEGREE PROGRAMMES
IN
MEDICAL SCIENCES
2019-2020



**SRI DEVARAJ URS ACADEMY OF HIGHER
EDUCATION AND RESEARCH**

**Comprising Sri Devaraj Urs Medical College
A Deemed To Be University**

Declared under section 3 of UGC, Act, 1956,
MHRD GOI NO.F,9-36/2006-U.3(A), Dt. 25th may 2007
Post box No. 62, Tamaka, Kolar-563101, Karnataka, INDIA
Ph:08152-210604, 210605, 243244:: Fax: 08152-243008
Website: www.sduu.ac.in, Email: office@sduu.ac.in / registrar@sduu.ac.in

Edition Year: 2020

Published by SDUAHER

VISION:

“UNIVERSITY OF EXCELLENCE - KNOWLEDGE FOR POSTERITY”

MISSION:

1. To be a global centre of excellence for Teaching, Training and Research in the field of Higher education.
2. To inculcate scientific temper, research attitude and social accountability amongst faculty and students.
3. To promote with value based education for the overall personality development and leadership qualities to serve the humanity.

OBJECTIVES:

1. To provide need based infrastructure and facilities to students to become responsible professionals with social commitment and accountability.
2. To implement effectively innovative programs in teaching learning and evaluation.
3. To impart scientific and socio cultural temperament among students to forge national identity and needs.
4. To provide instruction and training in Basic and advanced branches of learning.
5. To provide facilities for research for the advancement and dissemination of knowledge.
6. To undertake extra mural studies, consultancy, extension programmes and field outreach services for the development of society.
7. To collaborate with other Universities, Institutions of excellence and research organizations within the country and outside for the purpose of teaching, training and research.
8. To undertake need based activities for the betterment of socially and educationally backward society.

At a glance this logo is abstract, yet it contains the vital ingredients for an institution like Sri Devaraj Urs Academy of Higher Education and Research, Tamaka, Kolar.

The institution's medical background, Humanitarian values, Compassion,

Approachability, Social Commitment and the subsequent research towards the most precious thing, the human life, is the core theme.

The graphic form of a person in the centre of a bud represents the humanity. It denotes the growing process of life and its existence. And the two hands safeguarding them show the care and a sense of security. It is also capable of holding something within the vast expanse of knowledge by the University for the People's benefit. Hence, the motto "Knowledge for Posterity" is very appropriate and gives a punch in Red. The four light blue half circles (smaller to bigger) depict the unending quest for knowledge and imparting it to a wider horizon, growing higher and higher.

And finally, the whole unit is embedded in a "D" shaped graphic template as background to give it a corporate identity.

COLORS USED:

Deep Blue: Credible, Confident and Dependable. Represents Peace, Tranquility, Stability, Harmony, Trust, Security, Cleanliness and Loyalty

Light Blue: For Sky and Water (color scheme for 4 half circles)

Red: A dominant color for strengths.

Green: For Nature, Health and Generosity. It is cool quality soothes and has great healing powers



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION AND RESEARCH

Comprising Sri Devaraj Urs Medical College

(A Deemed to be University)

Declared under Section 3 of UGC Act, 1956, MHRD GOI No:F.9-36/2006-U.3 (A) Dt.25th May 2007

TAMAKA, KOLAR-563103, KARNATAKA, INDIA

Ph: 08152-243244, 243009,243160 Fax: 08152-243008 E-mail: registrar@sduu.ac.in/office@sduu.sc.in Website: www.sduu.ac.in

No. SDUAHER/KLR/ ADMN/1322/2020-21

Date:12/10/2020

NOTIFICATION

Sub: Regulations, curricula and syllabi of Postgraduate medical degree programmes in Preclinical, Paraclinical and clinical subjects- reg

Ref.

- I. Proceedings of the Academic Council meetings**
- II. Proceeding of the Board of Management meetings**
- III. MCI notifications**
- IV. SDUAHER notification:**

Academic Council Meetings		Board of Management Meetings	
19 th	17.11.2014	34 th	19.06.2015
21 st	25.04.2015	36 th	04.12.2015
22 nd	18.11.2015	44 th	23.06.2017
27 th	29.04.2017	45 th	09.11.2017
28 th	04.11.2017	48 th	20.06.2018
30 th	05.05.2018	50 th	22.12.2018
31 st	03.11.2018	54 th	06.07.2019
33 rd	04.06.2019	56 th	20.12.2019
34 th	15.11.2019	59 th	09.10.2020
36 th	30.09.2020		

Agenda discussed:

- Objectives of external postings of Post Graduates
- Internal & External postings of PG's with assessment tools
- Minimum marks to be scored in PG theory examinations
- Topics to be included in Forensic medicine and toxicology in paper 4 for PG students
- Work placed based assessment for PG students
- Introduction of Assessment of AETCOM in formative/summative assessment
- Design and development of E-portfolio for all PG's
- Patient handover as common EPA for all departments
- Preparation of Question paper from question bank using software

- Coding of answer booklet by software enabled barcoding
- Development of CBME in PG programmes
- Quarterly formative assessment as an assessment tool for all PGs
- Start course in MD psychiatry
- Implement E- Portfolio of PG's
- Discontinuation of practice for 5th evaluation in PG exam
- Post graduate training programme MCI-PG Medical Education Regulations 2000, amended upto May 2018
- Approval of EPA's as competency based medical training for PG's
- Work placed based assessment as part of quarterly assessment for PG's
- PLO's for all programmes

V. MCI Notifications

- MCI Notification dated 09-12-2009, vide No.MCI.18(1)/2009-Med.55455
- No. MCI-23(1)/2014/Med/153433 Dated 28-01-2015
- MCI Guidelines 2017(CBME based)
- MCI postgraduate medical education regulations 2000 amended upto 2018 (clause 13.2,gazette notification dated 05/04/2018)
- Basic Programme in Biomedical Research(MCI-23(1)/2019-Med./141602 dated 27-08-2019).
- MCI-12(2)/2019-Med.Misc./189334.- Dated:12th February 2020
- MCI-18(1)/2020-Med./121415.-date 16/09/2020- (District Residency Programme' (DRP)

VI. Office Memorandum No. SDUAHER / KLR/ ADMN /8071/2019- 20 Dated 22/06/2019

VII. SDUAHER / KLR/ ADMN /1571/2019-20 dated 12/09/2019

REGULATIONS FOR POST GRADUATE DEGREE PROGRAMME IN MEDICAL SCIENCES

CHAPTER- I

1. Branches of Study

1.1 Postgraduate Degree Programme

The following programmes may be pursued.

A. M.D. (Doctor of Medicine)

1. Anatomy
2. Physiology
3. Biochemistry
4. Pharmacology
5. Pathology
6. Microbiology
7. Forensic Medicine
8. Community Medicine
9. General Medicine
10. Dermatology, Venereology and Leprosy
11. Anesthesiology
12. Paediatrics
13. Radio-Diagnosis
14. Psychiatry

B. M.S. (Master of Surgery)

1. General Surgery
2. Obstetrics and Gynecology
3. Orthopedics
4. Ophthalmology
5. OTO-Rhino-Laryngology

1.2. Eligibility for Admission

1.2.1 MD / MS Degree Programme: A candidate affiliated to this academy and who has passed final year M.B.B.S. examination after pursuing a study in a medical college recognised by the Medical Council of India, from a recognised Medical College affiliated to any other Academy recognised as equivalent thereto, and has completed one year compulsory rotating internship in a teaching Institution or other Institution recognised by the Medical Council of India, and has obtained permanent registration of any State Medical Council will be eligible for admission.

1.2.2 A Candidate seeking admission should have successfully cleared the qualifying examination - NEET (National Eligibility cum Entrance Test) conducted by NBE (National Board of Examination).

1.3. Obtaining Eligibility Certificate by the Academy before making Admission

No candidate will be admitted for any postgraduate degree programme unless the candidate has obtained and produced the eligibility certificate issued by the Academy. The candidate has to make an application to the Academy with the following documents along with the prescribed fee:

1. S.S.L.C Marks card
2. 10+2 Certificate
3. All MBBS Marks Cards
4. Internship Completion Certificate
5. Attempt / Academic certificate
6. Degree Certificate
7. Transfer Certificate
8. Migration Certificate
9. Study/ Bonafide Certificate
10. Character & Conduct certificate
11. MCI Recognized Certificate by college
12. Karnataka Medical Council/State medical council
13. MCC Allotment Letter
14. NEET Admission Ticket
15. NEET Rank card
16. Caste (SC/ST) /OBC certificate (domicile) & Income Certificate
17. Aadhar card of both candidate and parents / sponsors
18. Bond for SR Ship
19. Remaining years fee bond

NOTE: The NRI/NRI Sponsor students have to submit the documents as per the MCC/DGHS Criteria for NRI status

Candidates should obtain the Eligibility Certificate before the last date for admission as notified by the Academy.

A candidate who has been admitted to postgraduate programme should register his / her name in the Academy within a month of admission after paying the registration fee.

1.4. Intake of Students

The intake of students to each programme will be in accordance with the ordinance in this behalf.

1.5. Duration of Study

a) M.D/M.S Degree Programme

The programme of study will be for a period of 3 years consisting of 6 academic terms.

1.6. Method of training

The training of postgraduate for degree will be residency pattern 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 participate in seminars, group discussions, grand rounds, case demonstration, clinics, journal review meetings, CPC and clinical meetings. Every candidate should participate in the teaching and training programme of undergraduate students. Training includes involvement in laboratory and experimental work and research studies.

1.6.1. Teaching methodology

1.6.1.1 Includes Didactic lectures, small group discussion such as seminars, journal clubs, symposia, reviews and guest lectures for acquiring theoretical knowledge.

1.6.1.2 Bedside teaching, grand rounds, structured interactive group discussions and clinical demonstrations should be the hallmark of clinical/practical learning with appropriate emphasis on e-learning. Student should have hand-on training in performing various procedures and ability to interpret various tests/investigations.

1.6.1.3 Exposure to newer specialized diagnostic/therapeutic procedures concerning her/his subject should be given.

1.6.4 Self-learning tools like assignments and case-based learning should be promoted.

1.6.2. Clinical postings and Rotation of posting

Basic medical sciences students will be posted to allied and relevant clinical departments or institutions. Students working in clinical departments will be posted to basic medical sciences and allied speciality departments or institutions. It should be done as concurrent studies during the 1st year of training Similarly Inter-unit rotation in the department should be done for a period of up to one year. Rotation in appropriate related subspecialties **should not extend for a period exceeding 06 months.** Postings to other specialty departments will be during the second year.

All postgraduates' students pursuing MD/MS in broad specialities shall undergo a compulsory residential rotation of three months in District Hospital / District Health system as a part of the course curriculum. Such rotation shall take place in the 3rd or 4th or 5th semester of the postgraduates programme. This rotation shall be termed as District residency programme and the postgraduate medical student undergoing training shall be termed as a District Resident.

Satisfactory completion of the District Residency shall be an essential condition before the candidate is allowed to appear in the final examination of the respective postgraduate course. The District Residency Programme Coordinator (DRPC) shall issue certificate of satisfactory completion of DRP and report on the performance of the District Resident on a prescribed format to the concerned Medical College and the Government of State/Union Territory. No. MCI-18(1)/2020-Med./121415. – date 16/09/2020

1.6.3. Clinical meetings:

Clinical meetings will be conducted within the department weekly and also inter departmental meetings will be conducted monthly to discuss uncommon/interesting cases.

1.6.4 Log book:

Each student should maintain a logbook and document day to-day activities like documentation of ward work, teaching and learning activities , clinical case discussion, procedures performed , seminars, journal clubs, symposium ,CPC meets, inter-unit/interdepartmental teaching sessions, mortality meets, workshops, CME/conferences .The Log books will be checked and assessed periodically by the faculty members imparting the training. This will in turn be evaluated/assessed by an external reviewer appointed by the Director of PG Studies biannually during the months of July and January. The log book should be preserved and presented at the time of summative examinations conducted by the Academy.

1.6.5 Research activities:

- 1.6.5.1 The student should know the basic concepts of research methodology plan a research project and be able to retrieve information from the library. The student should have a basic knowledge of statistics.
- 1.6.5.2 A postgraduate student of a postgraduate degree programme in broad specialities should present one poster presentation, read one paper at a national/state conference and publish 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 eligible to appear at the postgraduate degree examination. MCI Notification No.18(1)/2009/medicine/55455 Dated:09-12-2009
- 1.6.5.3 Department should encourage e-learning activities.

1.6.6 Basic Programme in Biomedical Research:

In order to improve the research skills of post-graduate students, the Board of Governors (BoG) has recommended a uniform research methodology programme across the country, the online programme, “Basic programme in Bio-medical Research”, will be offered by ICMR-National Institute of Epidemiology (ICMR-NIE), Chennai (www.nie.gov.in). The programme will explain fundamental concepts in

Research methodology. This programme is being offered through SWAYAM programme of ministry of human resource development through SWAYAM NPTEL (http://swayam.gov.in/nc_details/NPTEL)

1.6.7 Synopsis and Dissertation:

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

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

Every candidate pursuing MD/MS degree programme 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 will 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 and comparison of results and drawing conclusions.

The dissertation should be written under the following headings:

- Introduction
- Aims or Objectives of study
- Review of Literature
- Material and Methods
- Results
- Discussion
- Conclusion
- Summary
- References
- Tables
- Annexures

The written text of dissertation will be not less than 50 pages and will not exceed 150 pages excluding references, tables, questionnaires and other annexures. 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 will be certified by the guide, Head of the department and Head of the Institution.

Six hard copies of dissertation and one soft copy thus prepared will be submitted to

the Controller of Examination (CoE), six months before final examination on or before the dates notified by the Academy.

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

Guide: The academic qualification and teaching experience required for recognition by this Academy as a guide for dissertation work is as per Medical Council of India, Minimum Qualifications for Teachers in Medical Institutions Regulations, 1998. Teachers in a medical college/institution having a total of eight years teaching experience out of which at least four years teaching experience as Assistant Professor with at least one research publication in indexed journals gained after obtaining post graduate degree will be recognized as post graduate teachers. (No.MCI- 12(2)/2019-Med.Misc./189334.- Dated: 12th February 2020)

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 Sri Devaraj Urs Academy /Medical Council of India. The co- guide will be a recognized post graduate teacher of Sri Devaraj Urs Academy.

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 academy.

1.6.8 Journal Club:

Journal club will be conducted once a week. All the PG students are expected to attend and actively participate in discussion and enter the relevant details in the log book. Further, every candidate must make a presentation from the allotted journal(s), selected articles, at least four times a year and a total of 12 presentations in three years. The presentations would be evaluated using check lists and would carry weightage for internal assessment (See checklist - I in Chapter V). A time table with names of the student and the moderator should be announced periodically, (Quarterly).

1.6.9 Subject Seminar:

Subject seminar will be conducted once a week. All the PG students are expected to attend and actively participate in discussion and enter the relevant details in the log book, Further, every candidate must present selected topics at least four times a year and a total of 12 seminar presentations in three years. The presentations would be evaluated using check lists and would carry weightage for internal assessment (See checklist-II in Chapter V). A timetable for the subject with names of the student and the moderator should be announced periodically, (Quarterly).

1.6.10 Student Symposium:

Student Symposium as an additional inter departmental programme will be conducted periodically, once in three months. The evaluation may be similar to that described for subject seminar.

1.6.11 Ward Rounds:

Ward rounds are service or teaching rounds.

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

1.6.12 Clinico-Pathological Conference:

CPC will be conducted once in two months for all post graduate students. Presentation will be done by rotation. If cases are not available due to lack of clinical postmortems, it could be supplemented by published CPCs.

1.6.13 Inter Departmental Meetings:

These will be conducted once a month. These meetings will be attended by post graduate students and relevant entries must be made in the Log Book.

1.6.14 Teaching & Learning 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 as students. (See model checklist -III in Chapter V). Record of their participation should be documented in the Log book. Training of post graduate students in Educational Science and Technology is recommended.

Further, all postgraduate students are required to attend at least about 35 hours of didactic lecture as notified by the individual departments.

1.6.15 Entrustable Professional Activity:

EPAs are units of professional practice, defined as tasks or responsibilities to be entrusted to the unsupervised execution by a trainee once he or she has attained sufficient specific competence. EPAs are independently executable, observable, and measurable in their process and outcome, and therefore, suitable for entrustment decisions. The Entrustable professional activity (EPA) concept allows faculty to make competency-based decisions on the level of supervision required by trainees. The Academy has identified few such EPA's for all students in various degree programme. These are:

1. EPA 1: Gather a history and perform a physical examination

2. EPA 2: Prioritize a differential diagnosis following a clinical encounter
3. EPA 3: Recommend and interpret common diagnostic and screening tests
4. EPA 4: Obtain informed consent for tests and / or procedures
5. EPA 5: Recognize a patient requiring urgent or emergent care and initiate evaluation and management
6. EPA 6: Give or receive a patient handover to transition care responsibility
7. EPA 7: Undertake complete patient monitoring including the preoperative and post-operative care of the patient.
8. EPA 8: Provide basic and advanced lifesaving support services in emergency situations
9. EPA 9: Collaborate as a member of an inter-professional team
10. EPA 10: Perform general procedures of a physician
11. EPA 11: Enter and discuss orders and prescriptions
12. EPA 12: Prepare a comprehensive discharge summary.
13. EPA 13: Form clinical questions and retrieve evidence to advance patient care.

However in addition to these common EPA's individual departments are advised to develop their own EPA's.

1.7. Continuing Medical Education (CME):

Every PG student must attend at least 2 CME programmes either at state/regional /zonal/national levels.

1.8. Conferences:

Attending conferences is optional. However it has to be encouraged. All students are encouraged to attend conferences (at state/national/international levels) to enable them to make paper/poster presentations, which is a mandatory requirement to fulfill before appearing for final examinations.

1.9. Attendance, Progress and Conduct:

- A candidate pursuing degree programme will 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 programme.
- Academic term of 6 months will be taken as a unit for the purpose of calculating attendance. The candidate should have 80% attendance in each academic term of 6 months.

- Every student will 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 term of the post graduate programme. Provided further, leave of any kind will not be counted as part of academic term without prejudice to minimum 80% attendance of training period every term.
- All the candidates joining the Post Graduate training programme will work as 'Full Time Residents' during the period of training and will attend not less than 80% (Eighty percent) of the imparted training during each academic term. Including assignments, full time responsibilities and participation in all facets of the education process.
- Any student who fails to complete the programme in the manner stated above will not be permitted to appear for the Academy Examinations.
- A Postgraduate student of a postgraduate degree programme would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published / accepted for publication/sent for publication during the period of postgraduate studies so as to make him eligible to appear at the postgraduate degree examination.

Ref: As MCI Notification dated 09-12-2009, vide No.MCI.18 (1)/2009- Med.55455 and Para No.4.

Procedure for defaulters:

Every department will have a committee containing Head of the department and PG guides 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.

2 Monitoring Progress of Studies:

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 will 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 Chapter V.

The learning outcomes to be assessed should include:

- Personal Attitudes,
- Acquisition of Knowledge,
- Clinical and operative skills,
- Teaching skills and
- Dissertation.

a. Personal Attitudes:

The essential items are:

- Caring attitudes
- Initiative
- Organisational ability
- Potential to cope with stressful situations and undertake 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. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors, self, peers, faculty from the unit and nurses. (Multi source feedback MSF) checklistXII

b. Acquisition of Knowledge:

The methods used comprise of

2.1 Log book: (Check List - XIII Chapter - V)

'Log Book' which records participation in various teaching / learning activities by the students. The number of activities attended and the number in which presentations are made must be recorded. The log book will periodically be validated by the supervisors. Some of the activities are listed. During the training period, the post graduate student should maintain a Log Book indicating various teaching / learning activities, duration of the postings/work done in Wards including super specialty, OPDs and Casualty. This should indicate the specified number of cases for clinical discussion, procedures and operations observed, assisted and performed /presented seminars and review articles from various journals in inter- unit/inter departmental teaching sessions.

The purpose of the Log Book is to:

- Help maintain a record of the work done during training,
- Enable Consultants to have direct information about the work; intervene if necessary,
- Use it to assess the experience gained periodically.

The log book will be used to aid the internal evaluation of the student.

The Log books will be checked and assessed periodically, monthly basis by guide / head of the unit/ head of the department and biannually by external reviewer.

Procedure for defaulters:

Every department will 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 will 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

2.2 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 Chapter V)

2.3 Seminars/Symposia:

The topics will 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 will be assessed using a checklist (see Model Checklist -II, Chapter V)

2.4 Clinico'-Pathological conferences:

This will 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.

2.5 Surgical Audit:

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

2.6 Clinical skills

Day to Day work: Skills in outpatient and ward work will be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills (see Model Checklist -V, Chapter V). – Mini CEX (Model check list VII, Chapter V)

2.7 Clinical meetings (Clinical Presentations) :

Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list (see Model checklist V, Chapter V).

2.8 Clinical and Operative skills:

The candidate will be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by DOPS (Model check list VI, Chapter V). Particulars are recorded by the student in the log book.

2.9 Teaching skills:

Post graduates are required to teach undergraduate medical students and paramedical students, if any (*as a part of Post graduate training*). This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students (See Model checklist III, Chapter V) - Microteaching Pedagogy (Model check list VIII, Chapter V)

2.10 Dissertation in the Department:

Periodic presentations must be made in the department. Initially the topic selected is to be presented before submission to the Academy for registration and again before finalization for critical evaluation and before final submission of the completed work (See Model Checklist IX & X, Chapter V)

2.11 Periodic tests:

The concerned departments will conduct quarterly tests. The final test will be held three months before the final examination. The tests may include written papers, practical's / clinical and viva voce. Records and marks obtained in such tests will be maintained by the Head of the Department and sent to the Academy, when called for.

2.12 Work diary / Log Book-

Every candidate will maintain a work diary and record his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. Special mention must be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.

2.13 Records:

Monthly and quarterly reviews of records, log books and marks obtained in tests will be maintained by the Head of the Department and will be made available to the Academy, when called for.

3. ASSESSMENT:

3.1 Formative Assessment

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 to 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. This includes assessment of patient care, procedural & academic skills, interpersonal skills, professionalism, self-directed learning and ability to practice in the system.

Checklists are given in Chapter-V

Assessment during the MS/MD training should be based on:

Assessment at end of rotation (Quarterly Postgraduate Student's Appraisal Form) by the Unit Head. The student to be assessed periodically as per categories listed in **Postgraduate Student Appraisal Form** (See Model checklist-X, Chapter V).

Multisource Feedback (MSF) - Quarterly

MSFs should be obtained quarterly from:- 2 from faculty of the unit/department; 2 from peers posted in the unit; 2 from interns, 2 from staff nurses from the areas attached to the unit, 2 from patient/patient relative. (Checklist XII - Chapter V)

Periodic assessment -The Quarterly tests may include written papers (theory), practical's / clinical and viva voce.

Quarterly Postgraduate Student's Appraisal Form (See Model checklist-X I, Chapter V).

- Journal based/ recent advances learning
- Patient based or Skill based learning
- Self-directed learning and teaching
- Departmental & interdepartmental learning activity
- External & Outreach activities/ Continuing Medical Education (CME)
- Attendance, Progress and Conduct

A candidate pursuing degree programme 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 programme.

Academic term of 6 months will be taken as a unit for the purpose of calculating attendance. Every student will 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 term of the post graduate programme. Provided further, leave of any kind will not be counted as part of academic term without prejudice to minimum 80% attendance of training period every term.

All the candidates joining the Post Graduate training programme will work as 'Full Time Residents' during the period of training and will attend not less than 80% (Eighty percent) of the imparted training during Academic Term of 6 months including assignments, full time responsibilities and participation in all facets of the education process.

Any student who fails to complete the programme in the manner stated above will not be permitted to appear for the Academy Examinations.

A Postgraduate student of a postgraduate degree programme in broad specialities/super specialities would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published / accepted for publication/sent for publication during the period of postgraduate studies so as to make him eligible to appear at the postgraduate degree examination.

Ref: As MCI Notification dated 09-12-2009, vide No.MCI.18 (1)/2009-Med.55455 and Para No.4.

Procedure for defaulters:

Every department should have a committee containing Head of the department and PG guides 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.

3.2 Scheme of examinations

Summative assessment

The summative examination would be carried out as per the Rules given in POSTGRADUATE MEDICAL EDUCATION REGULATIONS, 2000 and amended up to 2018. (The Clause 14 under the heading "EXAMINATION" shall be substituted in terms of Gazette Notification published on 05.04.2018).

The examination will be in three parts:

3.2.1 DISSERTATION

Every post graduate student will carry out work on an assigned research project under the guidance of a recognized Post Graduate Teacher, the result of which will be written and submitted in the form of a dissertation. Work for writing the dissertation is aimed at contributing to the development of a spirit of enquiry, besides exposing the candidate to the techniques of research, critical analysis, acquaintance with the latest advances in medical science and the manner of identifying and consulting available literature. Dissertation will be submitted at

least six months before the Theory and Clinical / Practical examination. The dissertation will be examined by a minimum of three examiners; one internal and two external examiners, who will not be the examiners for Theory and Clinical examination. A candidate will be allowed to appear for the Theory and Practical/Clinical examination only after the acceptance of the dissertation by the examiners.

3.2.2. THEORY

There will be four question papers, each of three hours duration. Each paper will consist of ten questions each question carrying 10 marks, so the total marks for each paper will be 100. Questions on recent advances maybe asked in any or all the papers. The examinations will be organised on the basis of 'Grading' or 'Marking system' to evaluate and to certify candidate's level of knowledge, skill and competence at the end of the training. The Clause 14 under the heading "EXAMINATION" shall be substituted in terms of Gazette Notification published on 05.04.2018 and the same is as under:-

Obtaining a minimum of 40% marks in each theory paper and not less than 50% cumulatively in all the four papers for degree examinations and three papers in diploma examination. Obtaining of 50% marks in Practical examination shall be mandatory for passing the examination as a whole in the said degree/diploma examination as the case may be. Obtaining a minimum of 50% marks in 'Theory' as well as 'Practical' separately will be mandatory for passing examination as a whole. The examination for MS/MD will be held at the end of 3rd academic year.

3.2.3. Clinical / Practical and viva voce Examination

Clinical examination will be conducted to test the knowledge, skills, attitude and competence of the post graduate students for undertaking independent work as a specialist/Teacher, for which post graduate students will examine a minimum one long case and two short cases.

The Oral examination will be thorough and will aim at assessing the post graduate student's knowledge and competence about the subject, investigative procedures, therapeutic technique and other aspects of the specialty, which form a part of the examination.

Assessment may include Objective Structured Clinical Examination (OSCE) Oral/Viva-voce examination needs to assess knowledge on X-rays, instrumentation, operative procedures. Due weightage should be given to Log Book Records and day to-day observation during the training.

ALLOTMENT OF MARKS

THEORY	MARKS ALLOTMENT	MAXIMUM MARKS	
PAPER-I	10 X 10	100	400
PAPER-II	10 X 10	100	
PAPER-III	10 X 10	100	
PAPER-IV	10 X 10	100	

<u>CLINICALS/ PRACTICALS</u>		200
<u>VIVA VOCE</u>	<u>80</u>	100
<u>PEDAGOGY</u>	<u>20</u>	
TOTAL		700

3.2 Examiners:

There will be at least four examiners in each subject. Out of them two will be external examiners and two will be internal examiners. The qualification and teaching experience for appointment as an examiner will be as laid down by the Medical Council of India. No person will be appointed as internal examiner in any subject unless he/she has three years' experience as recognized PG teacher in the concerned subject. For external examiners he/she should have minimum six years of experience as recognized PG teacher in the concerned subject.

3.2.4 Criteria for declaring as pass in Academy Examination:

A candidate should score minimum 40% marks in each theory paper and not less than 50% marks cumulatively in all the papers in postgraduate degree/diploma, to be declared as pass in the examinations. A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical including 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. (No. MCI-23(1)/2014/Med/153433 Dated 28-01-2015) A failed candidate may appear in any sub-subsequent examination upon payment of fresh fee to the Registrar of the University.

3.2.5 Declaration of distinction:

A successful candidate passing the Academy examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate marks are 75 percent and above. Distinction will not be awarded for candidates passing the examination in more than one attempt.

3.2.6 Number of Candidates per day.

The maximum number of candidates for practical/clinical and viva-voce examination will be as under: MD / MS Programme: Maximum of 8 per day

4. ELIGIBILITY CRITERIA FOR APPEARING FOR EXAMINATIONS 4.1 ATTENDANCE

All the candidates joining the Post Graduate training programme will work as 'Full Time Residents' during the period of training and will attend not less than 80% (Eighty percent) of the imparted training during Academic Term of 6 months including assignments, full time responsibilities and participation in all facets of the education process.

- Every student will attend all teaching programmes 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 programme. Provided further, leave of any kind will not be counted as part of academic term without prejudice to minimum 80% attendance of training period every term.
- Any student who fails to complete the programme in the manner stated above will not be permitted to appear for the Academy Examinations.

4.2. PROGRESS AND CONDUCT

- Every student will attend symposia, seminars, conferences, journal review meetings, grand rounds, CPC, case presentation, clinics and lectures during each term 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 term of the post graduate programme. Provided further, leave of any kind will not be counted as part of academic term without prejudice to minimum 80% attendance of training period every term.

4.3. RESEARCH ACTIVITIES-PAPER/POSTER/PUBLICATIONS

- A Postgraduate student of a degree programme in broad speciality would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published / accepted for publication/sent for publication during the period of postgraduate studies so as to make him eligible to appear at the postgraduate degree examination. Ref: As MCI Notification dated 09-12-2009, vide No.MCI.18 (1)/2009-Med.55455 and Para No.4.
- It is mandatory for all postgraduate students to undergo training in online programme in "Basic Programme in Biomedical Research" Which should be completed by the end of second semester .Not completing the programme will make them ineligible for appearing for the final academy examinations.(MCI-23(1)/2019-Med./141602 dated 27-08-2019).

4.4 DISSERTATION

Every post graduate student will carry out work on an assigned research project under the guidance of a recognised Post Graduate Teacher, the result of which will

be written and submitted in the form of a dissertation. Dissertation will be submitted at least six months before the Theory and Clinical / Practical examination. The dissertation will be examined by a minimum of three examiners; one internal and two external examiners, who will not be the examiners for Theory and Clinical examination. A candidate will be allowed to appear for the Theory and Practical/Clinical examination only after the acceptance of the dissertation by the examiners.

4.5 District Residency Programme

All postgraduates students pursuing MD/MS in broad specialties shall undergo a compulsory residential rotation of three months in District Hospital / District Health system as a part of the course curriculum. Such rotation shall take place in the 3rd or 4th or 5th semester of the postgraduates programme. This rotation shall be termed as District residency programme and the postgraduate medical student undergoing training shall be termed as a District Resident.

Satisfactory completion of the District Residency shall be an essential condition before the candidate is allowed to appear in the final examination of the respective postgraduate course. The District Residency Programme Coordinator (DRPC) shall issue certificate of satisfactory completion of DRP and report on the performance of the District Resident on a prescribed format to the concerned Medical College and the Government of State/Union Territory. No. MCI-18(1)/2020-Med./121415. – date 16/09/2020

Procedure for defaulters:

Every department should have a committee containing Head of the department and PG guides 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.

CHAPTER II
**GOALS AND GENERAL OBJECTIVES OF POSTGRADUATE MEDICAL
EDUCATION PROGRAM**

GOALS:

The goal of postgraduate medical education will be to produce a competent specialist and/or a medical teacher:

- i. Who will 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 will have mastered most of the competencies, relating to the specialty, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system;
- iii. Who will be aware of the contemporary advances and developments in the discipline concerned;
- iv. Who will have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology; and
- v. Who will 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 will 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 programmes, 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 concepts 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 health team engaged in health care, research or training.

STATEMENT OF THE COMPETENCIES

Keeping in view the general objectives of postgraduate training, each disciplines will aim at development of specific competencies, which will be defined and spelt out in clear terms. Each department will produce a statement and bring it to the notice of the trainees in the beginning of the programme 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 will be:

- Theoretical knowledge
- Practical/clinical Skills
- Training in Thesis.
- Attitudes, including communication.
- Training in research methodology.

Source: Medical Council of India, Regulations on Postgraduate Medical Education, 2006 and 2008.

COMPETENCY BASED POSTGRADUATE TRAINING PROGRAMME FOR M.D. FORENSIC MEDICINE & TOXICOLOGY

GOALS:

The goal of MD Forensic Medicine is to train a medical graduate to become a competent medico-legal expert, teacher and researcher in the subject who:

- Is aware of medico-legal aspects in various settings.
- Is aware of contemporary advances and developments in the field of Forensic Medicine.
- Has acquired the competencies pertaining to the subject of Forensic Medicine that are required to be practiced at all levels of health system.
- Is oriented to the principles of research methodology.
- Has acquired skills in educating and imparting training to medical, paramedical and allied professionals.

OBJECTIVES:

A medical graduate, upon successfully qualifying in the M.D (Forensic Medicine) examination, should be able to:

- Become an expert in Forensic Medicine.
- Identify and define medico-legal problems as they emerge in the community and work to resolve such problems by planning, implementing, evaluating and modulating medicolegal services.
- Undertake medico-legal responsibilities and discharge medico-legal duties in required settings.
- Keep abreast with all recent developments and emerging trends in Forensic Medicine, medical ethics and the law.
- Deal with general principles and practical problems related to forensic, clinical, emergency, environmental, medico-legal and occupational aspects of toxicology.
- Deal with medico-legal aspects of psychiatry, mental health and drug addiction.
- Impart education in Forensic Medicine and Toxicology to under-graduate and postgraduate students with the help of modern teaching aids.
- Assess the student's knowledge and skills in the subject of Forensic Medicine.
- Oriented to research methodology and conduct of research in the subject.

SUBJECT SPECIFIC COMPETENCIES

By the end of the course, the student should have acquired knowledge (cognitive domain), professionalism (affective domain) and skills (psychomotor domain) as given below:

A. Cognitive domain

1. Describe the legal and medico-legal system in India.
2. Acquire knowledge on the philosophy and guiding principles of Forensic Medicine.
3. Describe the programme goals and objectives of the Forensic Medicine.
4. Acquire knowledge on conduct of medico-legal autopsy independently with required physical assistance, prepare report and derive inferences.
5. Outline the principles and objectives of post mortem examination.
6. Describe the formalities and procedures of medico-legal autopsies in accordance with existing conventions and the law.
7. Identify the role of anatomy, physiology, biochemistry, microbiology, pathology, blood bank, psychiatry, radiology, forensic science laboratory as well as other disciplines of medical science to logically arrive at a conclusion in medico-legal autopsies and examination of medico-legal cases.
8. Describe the principles of the techniques used in toxicological laboratory namely Thin Layer Chromatography, Gas Liquid Chromatography, Atomic Absorption Spectrophotometry, High Performance Liquid Chromatography and Breath Alcohol Analyser.
9. Describe relevant legal/court procedures applicable to medico- legal/medical practice.
10. Describe the general forensic principles of ballistics, serology, analytical toxicology and photography.
11. Interpret, analyse and review medico-legal reports prepared by other medical officers at the time of need.
11. Describe role of DNA profile and its application in medico-legal practice.
12. Describe the law/s relating to poisons, drugs, cosmetics, narcotic drugs and psychotropic substances.
13. Describe the legal and ethical aspects of Forensic Procedures including Narco-analysis, Brain mapping and Polygraph etc.
14. Describe the medico-legal aspects of psychiatry, addiction and mental health.

B. Affective domain

1. Should be able to function as a part of a team, develop an attitude of cooperation with colleagues, and interact with the clinician or other colleagues to provide the best possible opinion.

2. Should be able to follow ethical principles in dealings with patients, police personnel, relatives and other health personnel and to respect their rights.
3. Follow medical etiquettes in dealing with each other.
4. Develop communication skills to word reports and professional opinion as well as to interact with patients, relatives, peers and paramedical staff, and for effective teaching.

C. Psychomotor domain

At the end of the course, the student should acquire following skills and be able to:

1. Perform medico-legal autopsy independently with required physical assistance, prepare report and derive inferences.
2. Perform medico-legal examination of users of alcohol, drugs and poisons and prepare report.
3. Perform medico-legal examination in cases of sexual offences and prepare report.
5. Interpret histopathological, microbiological, radiological, chemical analysis, DNA
6. Profile and other investigative reports for medico-legal purposes.
7. Perform medico-legal examination of bones, clothing, wet specimens and weapons.
8. Depose as an expert witness in a court of Law on medico-legal matters.
9. Examine, identify, prepare reports and initiate management on medico-legal cases in emergency set up.
10. Identify and discharge all legal responsibilities in medico-legal matters.
11. Plan, organize and supervise medico-legal work in general/teaching/district hospitals and in any health care set up.
12. Collect, preserve and dispatch various samples and trace evidences to the concerned authorities in appropriate manner.
13. Help and advice authorities on matters related to medical ethics and medico- legal issues.
14. Discharge duties in respect of forensic, clinical, emergency, environmental, medico-legal and occupational aspects of toxicology.
15. Plan, organize and manage toxicological laboratory services in any health care set up.
16. Provide information and consultation on all aspects of toxicology to professionals, industry, government and the public at large.
17. Manage medico-legal responsibilities in mass disasters involving multiple deaths like fire accident, traffic accident, aircraft accident, rail accident and natural calamities.

18. Do interaction with allied departments by rendering services in advanced laboratory investigations and relevant expert opinion.
19. Participate in various workshops/seminars/journal clubs/demonstration in the allied departments, to acquire various skills for collaborative research.

TIME FRAME TO ACQUIRE KNOWLEDGE & SKILLS

First year of PG programme:

1. Orientation Programme.
2. Basic autopsy skills.
3. Orientation to the applied aspects of Anatomy, Physiology, Biochemistry.
4. General principles of Forensic Medicine.
5. Introduction to Medical Toxicology.
6. Assisting in scheduling of teaching sessions.
7. Participation in undergraduate teaching.
8. Posting for autopsy work, clinical forensic medicine and toxicology.
9. Participation in departmental activities.
10. Participation in seminar, CME, workshop etc.
11. Orientation to organization and functioning of toxicology/research laboratory.
12. Preparation of thesis protocol.
13. Being self-updated with recent advances in the subject.

Second year of PG programme:

1. Conduct of autopsy examination without supervision in routine autopsy cases.
2. Conduct of autopsy examination with supervision in expert opinion cases.
3. Conduct of theory and practical sessions for undergraduates.
4. Thesis and another research work.
5. Clinical forensic medicine work for practical experience in medico-legal procedures and on-the-job practical training in medico-legal aspects of emergency medicine, radiology and other clinical disciplines.
6. Orientation to the applied aspects of Microbiology, Pathology, Blood Bank, Psychiatry as related to forensic sciences.
7. Posting for autopsy work, clinical forensic medicine and toxicology laboratory.
8. Attend court summons for cases conducted by themselves or where deputed to attend in cases where an expert is required to depose by Court of Law.

Third year of PG programme:

1. Organize teaching sessions and thesis work.
2. Submission of thesis six months prior to examination.

COURSE CONTENTS:

THEORY -

1. General Principles of Forensic Medicine and Toxicology

- Identify the role of anatomy, physiology, biochemistry, microbiology, pathology, blood bank, psychiatry, radiology, forensic science laboratory as well as other disciplines of medical science to logically arrive at a conclusion in medico-legal autopsies and examination of medico-legal cases.
- Describe the basic principles of techniques used in toxicological laboratory namely TLC, GLC, ASS, HPLC and Breath Alcohol Analyzer.
- Execute the skills and knowledge expected at undergraduate level.

2. Basic Sciences and allied Subjects

A. Anatomy: Anatomy of parts and organs of the body which are important from the medico-legal aspect.

- Describe surface and regional anatomy of head, neck, chest and abdomen.
- Describe gross anatomy and blood supply of heart, brain, lungs, spleen, liver and kidneys.
- Describe gross anatomy of male and female genitalia.
- Describe the comparative anatomy of male and female skeleton.
- Perform histological examination of various tissues.
- Describe the development of foetus.

B. Physiology and Biochemistry: Mechanism of phenomena that are important in the body from the medico-legal viewpoint.

- Describe mechanism of fluid and electrolyte balance, thermoregulation in new-born and adults, endocrine functions.
- Describe physiology of sexual behaviour.
- Describe physiological functioning of circulatory system, digestive system, respiratory system, haemopoietic system, central nervous system and reproductive system including pregnancy.

C. Pathology: Pathophysiology of vital processes and response mechanisms that modulate tissue and organ reaction to all forms of injury and have a bearing on ante-mortem and post-mortem appearance in medico-legal cases, assessment of the duration of injuries and correlate trauma and disease.

- Describe pathology of inflammation and repair, immunity and hypersensitivity, thrombosis and embolism, electric and ionizing radiation injuries, genetic factors in disease, deficiency disorders and malnutrition.
- Describe pathology of myocardial infarction, congenital heart diseases, tuberculosis of lungs, cirrhosis of liver, diseases of glomeruli and tubules and interstitial tissues

of kidney, tumours, endocrine disorders, venereal diseases, spontaneous intracranial haemorrhages.

- Describe the pathology of sudden death.
- Describe local and systemic response to trauma and patho-physiology of shock.
- Describe pathology of common infections and infestations of medico-legal significance.

D. Dentistry: Adequate knowledge of dentistry for solution of medico-legal problems like, injuries, age determination and identification.

E. Radiology: Adequate knowledge of radiological procedures for solution of medico-legal problems.

F. Fundamentals of Forensic Medicine:

- Describe the general forensic principle of ballistics, serology, analytical toxicology and photography.
- Interpret the scene of crime.
- Describe role of DNA profile and its application in medico-legal practice.
- Examine bloodstains for blood grouping, nuclear sexing, HLA typing, seminal stains and hair for medico-legal purpose.
- Describe ethical aspects of Forensic Procedures including Narco-analysis, Brain mapping and Polygraph.

3. Medical Ethics and Law (Medical Jurisprudence)

- Describe the history of Forensic Medicine.
- Describe the legal and medico-legal system in India.
- Describe medical ethics and the law in relation to medical practice, declarations, oath, etiquette, Medical Council of India, disciplinary control, rights and duties of a registered medical practitioner's professional misconduct, consent, confidentiality and medical negligence.
- Describe medical ethics and law in relation to organ transplantation, biomedical human research and experimentation, human rights, cloning, genetic engineering, human genome, citizen's charter and International codes of medical ethics.
- Describe the ethics and law in relation to artificial insemination, abortion, antenatal sex, foetus, genetics and euthanasia.
- Interpret the ethics and law applicable to the human (clinical trials) and animal experimentation.
- Describe ethics in relation to elderly, women and children.
- Describe medical ethics and law in relation to nursing and other medical services/practices.
- Understanding about bio-ethics.

4. Clinical Forensic Medicine

- Examine, assess legal implications and prepare report or certificate in cases of physical assault, suspected drunkenness, sexual offences, consummation of marriage and disputed paternity.
- Collect, preserve and dispatch the specimen/material to the concerned authority and interpret the clinical and laboratory findings which are reported.
- Examine injured person, prepare medico-legal report and initiate management.
- Determine the age and establish identity of an individual for medico-legal purpose.
- Examine a person and assess disability in industrial accidents and diseases.
- Perform examination and interpret findings for medico-legal purposes in cases pertaining to pregnancy, delivery, artificial insemination, abortion, sterilization, impotence, AIDS and infectious disease.
- Describe normal and abnormal sexual behaviour and its medico-legal implications.
- Examine and assess the medical fitness of a person for insurance, government service, sickness and fitness on recovery from illness.
- Examine medico-legal problems related to clinical disciplines of medicine and allied subjects, Paediatrics, Surgery and allied subjects, ENT, Ophthalmology, Obstetrics and Gynaecology, Dermatology and Anaesthesiology.
- Examine medico-legal problems related to children, women and elderly.
- Identify the cases of torture and violation of human rights and issues thereto.

5. Forensic Pathology

- Apply the principals involved in methods of identification of human remains by race, age, sex, religion, complexion, stature, hair, teeth, anthropometry, dactylography, foot prints, hairs, tattoos, poroscopy and superimposition techniques.
- Perform medico-legal post-mortem and be able to exhume, collect, preserve and dispatch specimens or trace evidence to the appropriate authority.
- Diagnose and describe the pathology of wounds, mechanical and regional injuries, ballistics and wound ballistics, electrical injuries, lightning, neglect and starvation, thermal injuries, deaths associated with sexual offences, pregnancy, delivery, abortion, child abuse, dysbarism and barotraumas.
- Describe patho-physiology of shock and neurogenic shock.
- Describe patho-physiology of asphyxia, classification, medico-legal aspects and post-mortem findings of different types of asphyxial deaths.
- Diagnose and classify death, identify the signs of death, post-mortem changes, interpret autopsy findings, artefacts and results of the other relevant investigations toxicologically conclude the cause, manner (suicidal, homicidal and accidental) and time of death.
- Manage medico-legal responsibilities in mass disasters involving multiple deaths

like fire, traffic accident, aircraft accident, rail accident and natural calamities.

- Demonstrate post-mortem findings in infant death and to differentiate amongst live birth, still birth and dead born.
- Perform post-mortem examination in cases of death in custody, torture and violation of humanrights.
- Perform post-mortem examination in cases of death due to alleged medical negligence as in operative and anaesthetic deaths.

6. Toxicology

- Describe the law relating to poisons, drugs, cosmetics, narcotic drugs and a psychotropic substance.
- Examine and diagnose poisoning cases and apply principles of general management and organ system approach for the management of poisoning cases.
- Describe the basic principles of pharmacokinetics and pharmacodynamics of poisonous substances.
- Describe the toxic hazards of occupation, industry, environment and the principles of predictive toxicology.
- Collect, preserve and dispatch material/s for analysis, interpret the laboratory findings and perform the medico-legal formalities in a case of poisoning.
- Demonstrate the methods of identification and analysis of common poisons.
- Describe the signs, symptoms, diagnosis and management of common acute and chronic poisoning due to:
 - a. Corrosives
 - b. Non-metallic substances
 - c. Insecticides and weedkillers
 - d. Metallic substances
 - e. Vegetable and organic irritants
 - f. Somniferous compounds
 - g. Inebriant substances
 - h. Deliriant substances
 - i. Food contamination/adulteration
 - j. Substances causing spinal and cardiotoxicity
 - k. Substances causing asphyxia (Asphyxiants)
 - l. Household toxins
 - m. Toxic envenomation
 - n. Biological and chemical warfare
 - o. Environmental intoxicants

P. Occupational intoxicants

7. Forensic Psychiatry

- Explain the common terminologies of forensic importance in psychiatry.
- Describe the medico-legal aspects of psychiatry and mental health.
- Describe medico-legal aspects of drug addiction.
- Describe role of psychiatry in criminal investigation, punishment and trial.
- Describe the civil and criminal responsibilities of a mentally ill person.
- Describe the role of psychology in criminal investigation, punishment and trial.

TEACHING AND LEARNING METHODS

Method of training:

The training of postgraduate student shall be residency pattern with graded responsibilities in the teaching, writing medicolegal reports and research entrusted to the student. Every student should participate in seminars, group discussions, case demonstration, journal review meetings, teaching and training programme of undergraduate students and clinico – pathological case discussion.

Theory classes:

- ✓ Seminars, journal clubs, symposia, guest lectures, SGD and didactic lectures.
- ✓ Exposure to newer specialized diagnostic procedures.
- ✓ Self-learning tools like assignments and case-based learning will be promoted.
- ✓ All postgraduate students are required to attend at least about 35 hours of didactic lecture.

Practical:

- ✓ Student should have hands-on training in clinical forensic medicine cases at department of emergency medicine and ability to interpret various medico-legal reports, and investigations.
- ✓ Post graduate student should be able to know various techniques in dissecting the dead body at mortuary, exhumation procedure and crime scene investigations.

Seminar/ Journal club:

- ✓ Seminars will be held once a week. All the PG students are expected to attend and actively participate in discussion and enter the relevant details in the log book, Further, every candidate must present selected topics at least four times a year and a total of 12 or more seminar presentations in three years. The presentations would be evaluated using check lists and would carry weightage for internal assessment (See Annexure 2). A timetable for the subject with names of the student and the moderator will be scheduled at the beginning of every month.
- ✓ Symposiums will be a multi-disciplinary programme. The evaluation will be

similar to that described for subject seminar.

Interdepartmental meeting:

- ✓ Interdepartmental meetings will be held once a month. The post graduate students should attend these meetings and relevant entries must be recorded in the Log Book.

Clinico pathological case discussion (CPC):

- ✓ CPC will be held once a month and presentation will be done by rotation.

Group discussion:

- ✓ There will be intra- and inter- departmental meetings for discussing the uncommon /interesting cases involving multiple departments.

Grand Rounds:

- ✓ Clinical Forensic Medicine will be taught in the Emergency Medicine Department at hospital.

UG Teaching:

- ✓ Post graduate students must teach under graduate students by taking demonstrations, bed side clinics, tutorials, lectures etc.
- ✓ Assessment is made using a checklist by Forensic Medicine faculty as well as students. (See Annexure 5). Their participation should be recorded in Log book.

Rotation postings:

- A candidate of the M.D Degree Course in Forensic Medicine needs to be well versed in the applied aspects of Forensic Medicine and Toxicology. Such postings will be gaining confidence in interacting with the clinicians and specialists.

The following clinical postings are recommended:

Sl. No	Place of posting	First year	Second year
01	Emergency Medicine Department	1 month	1 month
02	Radiology	-	15 days
03	Psychiatry	-	10 days
04	Forensic science lab	-	22 days
05	Histopathology	-	15 days

OBJECTIVES AND ASSESSMENT:

The Post Graduate students are posted in the Departments of Emergency Medicine, Psychiatry, Radiology, Pathology and Forensic Science Laboratory.

1. Department of Emergency Medicine:

At the end of posting the medical graduate should be able to know

1. To differentiate between medical and medico legal cases.
2. Documentation of medico legal cases and maintenance of registers.
3. Diagnosis and treatment of poisoning cases.
4. To understand the indication, contraindication and procedure of gastric lavage
5. Recording of dying declaration.
6. Examine, document and report a case of sexual assault.

Assessment:

1. To maintain a log book and should be duly scrutinized by faculty in-charge
2. Seminar presentation
3. Theory, Practicals and MCQ's

1. Radiology:

At the end of posting the medical graduate should be able to

1. Interpret and report x-rays for age estimation in medico-legal cases.
2. Interpret and report x-rays for gunshot wounds.

Assessment:

1. To maintain a log book and should be duly scrutinized by faculty in-charge
2. Seminar presentation

2. Psychiatry:

At the end of posting the medical graduate should be able to

1. Understanding the interface between mental health and law.
2. Recent advance in mental health care act.

Assessment:

1. To maintain a log book and should be duly scrutinized by faculty in-charge
2. Seminar presentation
3. Long, short essay question and MCQs

3. Forensic Science Laboratory:

At the end of posting the medical graduate should be able to

1. To understand the basics of analytical techniques like colour tests and thin layer chromatography.
2. To collect the evidence at scene of crime and to understand the concept of Locard's principal of exchange.
3. To understand the basics of forensic ballistics, serology and photography.
Assessment:
4. To maintain a log book and should be duly scrutinized by faculty in-charge
5. Seminar presentation
6. MCQ's/ OSPE

4. Histopathology:

At the end of posting the medical graduate should be able to

1. To identify and prepare medico legal inference from histopathological slides of myocardial infarction, pneumonitis, tuberculosis, brain infarct, liver cirrhosis, brain haemorrhage, bone fracture, pulmonary oedema, brain oedema, soot particles, diatoms and wound healing.
2. Preservation of pathological specimens Assessment:
 1. To maintain a log book and should be duly scrutinized by faculty in-charge
 2. Seminar presentation
 3. Long and short essay question

Entrustable Professional Activity:

Eight common EPAs

*Proceedings of 34th Meeting of Academic Council held on 15th November 2019

1. Gather a history and perform a physical examination
2. Prioritize a differential diagnosis following a clinical encounter
3. Recommend and interpret common diagnostic and screening tests
4. Enter and discuss orders and prescriptions
5. Document a clinical encounter in the patient record
6. Provide an oral presentation of a clinical encounter
7. Form clinical questions and retrieve evidence to advance patient care
8. Give or receive a patient handover to transition care responsibility

Five specific EPAs to Forensic Medicine

9. Examination of survivor/accused of sexual offences and framing the opinion
10. Receiving, analysing the police inquest and conduct post mortem examination and reporting
11. Collection of evidences, preservation and dispatch to appropriate authorities for analysis
12. Documenting medicolegal reports in emergency medicine department

13. Forensic psychiatry evaluation in criminal and civil settings

Title of EPA No. 9	Examination of survivor/accused of sexual offences and framing the opinion
Description of EPA	<p>Postgraduate students should be able to facilitate quality, consistent, safe and effective professional practice.</p> <p><u>Knowledge and skills required include –</u></p> <ol style="list-style-type: none"> 1. To provide care that is victim centered, gender sensitive, compassionate and non- judgmental 2. To perform sexual assault examination in a supportive manner 3. To understand and maintain objectivity in relation to survivor and suspect in sexual assault cases and proper documentation 4. To perform consent procedure and detailed external and internal examination, identifying signs of trauma and collecting appropriate evidence based on history 5. To properly collect all the evidences, packing, labelling and maintain the chain of custody 6. To frame provisional and final opinions
Relevant Core Competencies	<ul style="list-style-type: none"> • Clinician – knowledge, analysis, interpretation of data • Communicator – communicate with survivor/accused • Lifelong learner – updated information on examination and legal implication • Professional – Demonstrates significant awareness of own limitation <p><u>Level of competence:</u></p> <p>Level 1 – Knowledge only; can observe – 6 months Level 2 – Can perform under strict supervision – 12 months Level 3 – Can perform under supervision – 24 months Level 4 – Can perform independently – 32 months Level 5 – Has expertise to teach others – 36 months All PG’s expected to reach level 4 at the end of 3 years</p>
Assessment method	Direct Observation, Case logs, DOPS

Title of EPA No- 10	Receiving, analysing the police inquest and conduct post mortem examination and reporting
Description of EPA	<p>Postgraduate students should be able to apply knowledge and skills in conduct of post mortem examination and preparation of report.</p> <p><u>Knowledge and skills required include –</u></p> <ol style="list-style-type: none"> 1. To obtain inquest forms from the investigating officer. 2. To gather history and perform external examination. 3. To choose an appropriate technique for conduct of autopsy. 4. To perform internal examination. 5. To collect the necessary viscera for chemical analysis. 6. To prepare the provisional autopsy diagnosis and final report.
Relevant Core Competencies	<ul style="list-style-type: none"> • Clinician – knowledge, analysis, interpretation of data. • Communicator – communicate with relatives of deceased. • Lifelong learner – updated information on examination and legal implication. • Professional – Demonstrates awareness of own limitation. <p><u>Level of competence:</u></p> <p>Level 1 – Knowledge only; can observe – 6 months Level 2 – Can perform under strict supervision – 12 months Level 3 – Can perform under supervision – 18 months Level 4 – Can perform independently – 24 months Level 5 – Has expertise to teach others – 36 months All PG's expected to reach level 4 at the end of 3 years</p>
Assessment method	Direct Observation, Case logs, DOPS

Title of EPA No. 11	Collection of evidence, preservation and dispatch to appropriate authorities for analysis
Description of EPA	Postgraduate students should be able to apply

	<p>knowledge and skills in collection and dispatch of evidences.</p> <p><u>Knowledge and skills required include –</u></p> <ol style="list-style-type: none"> 1. Knowledge on Medicolegal case & trace evidences. 2. To collect the evidences as per the case. 3. To choose the proper method of preservation with suitable preservative. 4. To seal and label the articles with all required information. 5. To maintain the chain of custody.
Relevant Core Competencies	<ul style="list-style-type: none"> • Clinician – knowledge, analysis, interpretation of data. • Communicator – communicate with the investigating officer. • Lifelong learner – updated information on trace evidence and legal implication. • Professional – Demonstrates awareness of own limitation. <p><u>Level of competence:</u></p> <p>Level 1 – Knowledge; can observe – 12 months Level 2 – Can perform under strict supervision – 18 months Level 3 – Can perform under supervision – 24 months Level 4 – Can perform independently – 32 months Level 5 – Has expertise to teach others – 36 months All PG's expected to reach level 4 at the end of 3 years</p>
Assessment method	<p>Direct Observation Case logs DOPS</p>

Title of EPA No 12	Documenting medicolegal reports in emergency medicine department.
Description of EPA	<p>Postgraduate students should be able to apply knowledge and skills in preparation of wound certificate.</p> <p><u>Knowledge and skills required include –</u></p> <ol style="list-style-type: none"> 1. To identify and discharge all legal responsibilities in medico-legal cases. 2. To have knowledge about the injuries.

	<ol style="list-style-type: none"> 3. To recognize common injury patterns such as are seen in blunt trauma, sharp injury, firearms injury, transportation-related fatalities, asphyxial injuries, temperature and electrical injuries, and suspected child and elder abuse. 4. To be able to write the report.
Relevant Core Competencies	<ul style="list-style-type: none"> • Clinician – knowledge, analysis, interpretation of information • Communicator – communicate with the patient / relatives and investigating officer. • Lifelong learner – updated information on examination and legal implication • Professional – Demonstrates awareness of own limitation <p><u>Level of competence:</u> Level 1 – Knowledge; can observe – 6 months Level 2 – Can perform under strict supervision – 12 months Level 3 – Can perform under supervision – 18 months Level 4 – Can perform independently – 24 months Level 5 – Has expertise to teach others – 32 months All PG’s expected to reach level 4 at the end of 3 years</p>
Assessment method	Direct Observation Documentation of written format in practical record.

Title of EPA No 13	Forensic psychiatry evaluation in criminal and civil settings.
Description of EPA	Postgraduate students should be able to apply knowledge and skills in the assessment and management of people with psychiatric disorders. <u>Knowledge and skills required include</u> – <ol style="list-style-type: none"> 1. To demonstrate basic knowledge of the legal regulation of psychiatric practice. 2. To educate medical and / or legal professionals on civil and criminal law. 3. To independently apply knowledge of civil

	<p>legal matters relevant to psychiatry.</p> <p>4. To recognize and apply ethical principles to conflict that arise within the practice of forensic psychiatry.</p> <p>5. To demonstrate knowledge of the various assessment methods used in forensic evaluations and the strengths and limitation thereof.</p>
Relevant Core Competencies	<ul style="list-style-type: none"> • Clinician – knowledge, analysis, interpretation of data • Communicator – communicate with the family members • Lifelong learner – Information on examination and legal implication • Professional – Demonstrates awareness of own limitation <p><u>Level of competence:</u></p> <p>Level 1 – Knowledge only; can observe – 12 months</p> <p>Level 2 – Can perform under strict supervision – 18 months</p> <p>Level 3 – Can perform under supervision – 24 months</p> <p>Level 4 – Can perform independently – 32 months</p> <p>Level 5 – Has expertise to teach others – 36 months All PG’s expected to reach level 4 at the end of 3 years</p>
Assessment method	<p>Case logs</p> <p>Documentation in the record book</p>

Sl. NO	EPA	Competency Domains						At the end of 6 months	At the end of 12 months	At the end of 24 months	At the end of 32 months	Evaluation
		MK	PC	PBLI	SPB	P	ISC					
1	9	Yes	Yes	Yes	Yes	Yes	Yes	1	2	3	4	Direct Observation Case logs DOPS

2	10	Yes	--	Yes	Yes	Yes	Yes	1	2	3	3, 4	Direct Observation Case logs DOPS
3	11	Yes	--	Yes	Yes	Yes	--	1	1, 2	2, 3	4	Direct Observation Case logs DOPS
4	12	Yes	Yes	Yes	Yes	Yes	Yes	1	2, 3	3, 4	4	Direct Observation 360° evaluation Documentation of written format in practical record.
5	13	Yes	Yes	Yes	Yes	Yes	Yes	1	1, 2	3	4	Case logs Documentation in the record book

MK: Medical Knowledge

PC: Patient care

PBLI: Practice based learning and improvement

SBP: Systems based Practice

P: Professionalism

ISC: Interpersonal communication skill

ASSESSMENT:

Formative Assessment:

General Principles:

Internal Assessment should cover all domains of learning (cognitive, affective and psychomotor) and give feedback to student to know the levels of learning. The Internal Assessment will be conducted in theory and practical examination. Quarterly assessment should be done during the postgraduate training based on following educational activities: The student will be assessed periodically as per categories listed in postgraduate student appraisal form (Annexure I).

- The PG trainee will be required to conduct minimum of 100 autopsy cases and 100 clinical cases during the entire training period.
- Attend court summons for cases conducted by themselves or when deputed where an expert is required to depose by the court of law.
- The PG trainee will be required to attend or accompany with expert to attend a minimum of 20 court summonses, of which at least 5 should pertain to clinical cases.

1. Workshop/CME/Conference:

- ✓ The Post Graduate Students should attend at least 2 state level CME programmes in 3 years.
- ✓ All students will be encouraged to attend conferences to enable them to prepare paper/poster presentations, which will be a mandatory requirement to fulfil before appearing for final examinations

2. Paper/ Poster/ Publication:

- ✓ A Postgraduate student in broad specialities will be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published / accepted for publication/sent for publication during the period of postgraduate studies so as to make him eligible to appear at the postgraduate degree examination. **Ref No:** As MCI Notification dated 09-12-2009, vide No.MCI.18 (1)/2009-Med.55455 and Para No.4.

3. Dissertation:

- ✓ Every candidate shall submit to the controller of examinations 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.
- ✓ Every candidate is required to carry out work on a selected research project under the guidance of a recognised 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, 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.
- ✓ The dissertation should be written under the following headings:
Introduction, Aims or Objectives of study, Review of Literature, Material and Methods, Results Discussion, Conclusion, Summary, References, Tables and

Annexures.

- ✓ The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and annexures. It should be neatly typed in double line spacing on one side of paper (A4 size) bond paper. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the institution.
 - ✓ Six hard copies of dissertation and one soft copy shall be prepared submitted to the controller of examinations, six months before final examination.
 - ✓ 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.
 - ✓ **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. 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 recognised as postgraduate teacher.
 - ✓ **A Co-guide** may be included provided the work requires substantial contribution from a parent department or another medical institution recognised for teaching/training by Sri Devaraj Urs 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.
- 4. Teaching Skills:**
- ✓ Post graduate students must teach under graduate students by taking demonstrations, bedsideclinics, tutorials, lectures etc.
 - ✓ Assessment is made using a checklist by Forensic Medicine faculty as well as students. Record of their participation in Log book.
- 5. Log book:**
- ✓ Each student must be asked to present a specified number of cases for clinical discussion, perform procedures, present seminars, and review articles from various journals and interdepartmental teaching sessions. They should be entered in a Log Book. The Log books shall be checked and assessed periodically by the faculty members imparting the training. This will in turn be evaluated/assessed by an external reviewer appointed by the university biannually during the months of July and January.
- 6. Research activities:**
- ✓ The student should know the basic concepts of research methodology, plan a research project, be able to retrieve information from the library. The student

should have a basic knowledge of statistics.

- ✓ Department should encourage e-learning activities.

7. Basic Course in Biomedical Research:

- ✓ It is mandatory for all postgraduate students to undergo training in online course in “Basic Course in Biomedical Research” which should be completed by the end of second semester. Not completing the course will make them ineligible for appearing for the final university examinations. **Ref No:** MCI-23(1)/2019- Med./141602 dated 27-08-2019.

8. District Residency Programme:

- ✓ All postgraduate students pursuing MD/MS in broad specialities in all Medical Colleges/Institutions under the Indian Medical Council Act, 1956 shall undergo a compulsory residential rotation of three months in District Hospitals / District Health System as a part of the course curriculum. Such rotation shall take place in the 3rd or 4th or 5th semester of the Postgraduate programme. This rotation shall be termed as ‘District Residency Programme’ (DRP) and the postgraduate medical student undergoing training shall be termed as a ‘District Resident’. **Ref No:** MCI-18(1)/2020-Med./121415 date 16- 09-2020.

i. Monitoring Progress of Studies

1. Work diary/ Log books/Records:

Every candidate should maintain a work diary and record his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc.

2. Records:

- ✓ Monthly and quarterly reviews of records, 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.

3. Periodic tests:

- ✓ The department will conduct three tests, two of them annual tests, one at the end of first year and the other in the second year. The third test will be held three months before the final examination. The tests will include written papers, practicals and viva voce. Records and marks obtained in such tests will be maintained by the head of the department and sent to the university.

4. Dissertation:

- ✓ Every post graduate student shall carry out work on an assigned research project under the guidance of a recognised post graduate teacher, the result of which shall be written up and submitted in the form of a dissertation. This shall be submitted at least six months before the theory and practical examination. The dissertation shall be examined by a minimum of three

examiners; one internal and two external examiners, who shall not be the examiners for theory and practical examination. A candidate shall be allowed to appear for the theory and practical examination only after the acceptance of the dissertation by the examiners.

5. CBME/ WPBA/Mini CEX/DOPS/Quarterly assessment:

- ✓ Day to Day work: Skills in EMD and autopsy room will be assessed periodically. The assessment should include the candidate's sincerity and punctuality, analytical ability and communication skills (See Annexure). – Mini CEX (See Annexure)
- ✓ Candidates should periodically present cases to his peers and faculty members. This will be assessed using a check list (See Annexure).
- ✓ The candidate will be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by DOPS (See Annexure). These particulars are recorded by the student in the log book.

6. Teaching Skills:

- ✓ Candidates will be encouraged to teach undergraduate medical students. This performance will be based on assessment by the faculty members of the department and from feedback from the undergraduate students (See Annexure)
- microteaching and pedagogy (See Annexure)

7. Evaluation of teaching programs: Evaluation during the MD training programme shall be based on:

- ✓ Assessment at end of rotation (Quarterly Postgraduate Student's Appraisal Form) by the HOD.
- ✓ The student to be assessed periodically as per categories listed in Postgraduate Student Appraisal Form (See Annexure).
- ✓ Periodic assessment –The tests will include written papers (theory), practicals and viva voce.

1. Journal based/ recent advances learning

- i. Seminars
- ii. Journal Clubs

2. Patient based or Skill based learning

- i. Mini-CEX (mini clinical examination)
- ii. Case based discussions – Long case discussion and short case discussion.
- iii. DOPS (Directly Observed Procedural Skills)

3. Self-directed learning and teaching

- i. Log book
- ii. Additional training certificates

4. Departmental and interdepartmental learning activity

- i. Interdepartmental PG symposium
- ii. Clinico-pathological conference (CPC)
- iii. Clinical case discussion
- iv. Pedagogy session
- v. Central mortality meeting (Once in 3 months)
- vi. Monthly departmental mortality meeting (Once a month)

5. External & Outreach activities/ Continuing Medical Education (CME)

- i. External posting details: Allied speciality postings
 - ii. External postings details: SDUMC
 - iii. Annual departmental CME
 - iv. CMEs/Conferences/Workshops – External
- ✓ Quarterly Postgraduate Student's Appraisal Form (See Annexure).

Summative Assessment, ie, assessment at the end of training The examination shall be in three parts:

1. Dissertation

Dissertation shall be submitted at least six months before the Theory and Practical examination. The dissertation shall be examined by a minimum of three examiners; one internal and two external examiners, who shall not be the examiners for Theory and practical examination. A PG trainee shall be allowed to appear for Theory and Practical examination only after the acceptance of the Dissertation by the examiners.

2. Theory:

The examinations shall be organized on the basis of 'Grading' or 'Marking system' to evaluate and to certify PG trainee's level of knowledge, skill and competence at the end of the training. Obtaining a minimum of 50% marks in 'Theory' as well as 'Practical' separately shall be mandatory for passing examination as a whole.

The examination for M.D shall be held at the end of 3rd academic year.

Theory: There shall be four theory papers of three hours duration. These are:

Paper I: Basic of forensic medicine, basic sciences and allied subjects.

Paper II: Clinical forensic medicine and medical jurisprudence.

Paper III: Forensic pathology and toxicology.

Paper IV: Recent advances in Forensic Medicine, Forensic Psychiatry and Medical Toxicology, applied aspects of clinical disciplines and forensic sciences.

Clinical: Practical examination will be conducted for two days and should be as follows:

Day 1:

- **Clinical Cases-**(any 4) Age estimation, injury report, examination of an insane

person to evaluate criminal/civil responsibility, examination of an intoxicated person, examination of a suspected case of poisoning (acute/chronic), disputed paternity case and sexual offences (accused and victim).

- **Spotters**-(10) Histopathology slides, photographs, exhibit material, X-rays, mounted specimens, bones, poisons and weapons, charts etc.
- **Toxicology Exercises**-(02) Identification and details of common poisons or chemical tests etc.
- **Laboratory Tests**-(01) Identification of biological stains (Semen, Blood, Body fluids), Histopathology slides of medico legal relevance, gram and acid-fast staining etc.

Day 2:

- Post-mortem Examination.
- Thesis/Seminar Presentation - For assessment of research/teaching ability
- Discussion on a case for expert opinion
- Grand Viva Voce.

Allotment of marks:

Theory	Marks Allotment	Maximum Marks	Minimum Marks Required For Passing
PAPER-I	10 X 10	100	50
PAPER-II	10 X 10	100	50
PAPER-III	10 X 10	100	50
PAPER-IV	10 X 10	100	50

Practicals	Marks allotment	Maximum marks	50% marks required for passing
Long Case	1 X 100	100	100
Short Case	8X10	80	
Expert opinion	1X20	20	
Viva-Voce	80	100	50
Pedagogy	20		

Study material:

1. Recommended books -

- Subramanyam BV. Modi's Medical Jurisprudence and Toxicology. Butterworths India, New Delhi.
- Nandy A. Principles of Forensic Medicine, New Central Book Agency Calcutta.
- Reddy KSN. The Essentials of Forensic Medicine and Toxicology, K. Saguna Devi Publishers, Hyderabad.

- Parikh CK. Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology, CBS Publishers and Distributors, New Delhi.
- Bernard Knight. Forensic Pathology. Arnold Publishers London.
- Di Maio VJ, Di Maio D. Forensic Pathology. CRC Press New York.
- Camps FE. Gradwohl's legal Medicine. Bristol: John Wright and Sons Ltd.
- Di Maio VJM. Gunshot Wounds, CRC Press USA.
- Gordon I, Shapiro HA, Berson SD. Forensic Medicine – A Guide to Principle. Churchill Livingstone New York.
- Mant AK. Taylor's Principles and Practice of Medical Jurisprudence, Churchill Livingstone, New York.
- Parikh CK. Medicolegal Post-mortems in India. Medical Publications, Bombay.
- Gresham GA, Turner AF. Postmortem Procedures An illustrated Text Book. Wolfe Medical Publications.
- Ludwig J. Current Methods of Autopsy Practice. WB Saunders Company, London.
- Gordon I, Turner R. Medical Jurisprudence E and S Livingstone Ltd. London.
- Bernard Knight. Simpson's Forensic Medicine. Arnold Publishers London.
- Bernard Knight. Legal aspects of Medical Practice. Churchill Livingstone New York.
- Bernard Knight. (ed.) The Estimation of Time since Death in the early Post Mortem Period. Arnold Publishers London.
- Mason JK. Forensic Medicine- an illustrated reference. Chapman and Hall, London.
- Mason JK. Paediatric Forensic Medicine and Pathology. Chapman and Hall, London.
- Tedeschi Eckert. Forensic Medicine Vol. I -IV, WB Saunders Company.
- Polson, Gee, Knight. The Essentials of Forensic Medicine. Pergomann Press, UK.
- Simpson K. Taylor's Principle and Practice of Medical Jurisprudence. Vol. I-II.
- Krishan Vij. Textbook of Forensic Medicine and Toxicology Churchill Livingstone.
- Pillay VV. Textbook of Forensic Medicine and Toxicology, Paras Publishing, Hyderabad.
- Mukherjee JB. Textbook of Forensic Medicine and Toxicology, Arnold's Publishers, London.
- Henry J, Wiseman H. Management of Poisoning. Published by WHO, UNEP and ILO.
- Flanagan RJ et al. Basic Analytical Toxicology. Published by WHO, UNEP and ILO.
- Guidelines for Poison Control. Published by WHO, UNEP and ILO
- Genetics in Medicine – J. S. Thompson and M.W. Thompson.

- Research – How to plan, speak and write about it – C. Hawkins and M. Sorgi.

2. Recommended Journals -

03-05 international Journals and 02 national (all indexed) journals

Sl. No	Name of the Journal
1	American Journal of Forensic Medicine and Pathology
2	Forensic Science International
3	Journal of Forensic Science
4	Medicine Science and Law
5	Indian Journal of Forensic Medicine and Toxicology (IJFMT)
6	Journal of Indian Academy of Forensic Medicine (IAFM)
7	Indian Internet Journal of Forensic Medicine and Toxicology
8	Medico-Legal Update
9	Journal of Karnataka Association of Medico-Legal Society (J – KAMLS)
10	Journal of South India Medico-Legal Association (J-SIMLA)

20. Check-List for Evaluation of Journal:

Name of the Student:

Name of the Faculty:

Date:

SI. No.	Items for observation during presentation	Poor 0	Below Average	Average 2	Good 3	Very Good 4
1.	Article chosen					
2.	Extent of understanding of scope and 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					

21. Check-List for Evaluation of Seminar Presentation:

Name of the Student:

Name of the Faculty:

Date:

SI. No.	Observation during presentation	Below Average 1,2,3	Average 4,5,6	Good 7,8,9	Very Good >10
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					

22.

Check List for Evaluation of Clinical Forensic Medicine work at EMD:

Name of the Student:

Name of the Unit Head:

Date:

SI. No.	Points to be considered:	Below Average 1,2,3	Average 4,5,6	Good 7,8,9	Very Good 10
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.	Bed side manners				
8.	Rapport with patients				

9.	Counselling patient's relatives for blood donation or Post-mortem and Case follow up.				
10.	Overall quality of Ward work				
	Total Score :				

23. Evaluation form for Clinical Case Presentation at EMD

Name of the Student:

Name of the Faculty:

Date:

Sl. No.	Points to be considered	Below Average 1,2,3	Average 4,5,6	Above Average 7,8,9	Very Good 10
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 list				
	• Relevant order				
	• Interpretation of investigations				
11.	Ability to react to 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 For Evaluation of Teaching Skill Practice

SI. No.	Assessment	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		

24. Check List for Dissertation Presentation

Name of the Student:

Name of the Faculty:

Date:

SI. No.	Points to be considered divine	Below Average 1,2,3	Average 4,5,6	Good 7,8,9	Very Good 10
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 :				

25. Continuous Evaluation of Dissertation Work by Guide / Co-Guide

SI. No.	Items for observation during presentations	Below Average 1,2,3	Average 4,5,6	Good 7,8,9	Very Good 10
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:				

26. Check List for Evaluation of Log Book

a. Academic Activities Attended

Name:		Admission Year:	College:
Date	Type of Activity Specify: Seminar, Journal Club, Case Presentation, UG teaching	Particulars	

b. Academic Presentations Made by The Student

Name:		Admission Year:
College:		
Date	Topic	Type of Presentation Specify: Seminar, Journal Club, Case Presentation, UG teaching, etc.

c. Diagnostic and Autopsy Procedures Performed

Name: Admission Year:

College:

Date	Name	UHID No.	Procedure	Category O, A, PA, PI*

Key: O - Washed up and observed

A - Assisted a more senior autopsy surgeon

PA - Performed procedure under the direct supervision of a autopsy surgeon

PI - Performed independently

27. Checklist for overall Assessment Sheet

Name of the College:											
Academic Year:											
Sl. No	Faculty Members	Name of Student and Mean Score									
		A	B	C	I	E	F	G	H	I	J
1											
2											
3											
4											
5											
Total Score											

28. Quarterly Assessment

Name of the Department:

Name of the PG Student:

Period of Training: From.....To.....

Sr. No.	PARTICULARS	Not Satisfactory			Satisfactory			More Than Satisfactory			Remarks
		1	2	3	4	5	6	7	8	9	
1.	Journal based / recent advances learning										
2.	Patient based /Laboratory or Skill based learning										
3.	Self-directed learning and teaching										
4.	Departmental and interdepartment al learning activity										
5.	External and Outreach Activities / CMEs										
6.	Thesis / Research										

	work				
7.	Log Book Maintenance				

Publications

Yes/ No

Remarks*

***REMARKS:**

- Any significant positive or negative attributes of a postgraduate student to be mentioned.
- For score less than 4 in any category, remediation must be suggested.
- Individual feedback to postgraduate student is strongly recommended.

29. DOPS:

Trainee		Assessor	
Name :		Name:	
Assessment date:		Hospital DOPS took place:	
FEEDBACK:			
Verbal and written feedback is a mandatory component of this assessment.			
General			
Strengths			
Development needs			
Recommended actions			
TRAINEE REFLECTIONS ON THIS ACTIVITY (optional)			
What did I learn from this experience?			
What did I do well?			
What do I need to improve or change? How will I achieve it?			
RATINGS			
Your ratings should be judged against the standard laid out in the syllabus for the trainee's stage of training. N = Not observed D = Development required, S = Satisfactory (no prompting or intervention required) O = Outstanding			
Domain		Rating	Comments
1: Ability to discuss relevant clinical or other information (inquest and Panchanama) to formulate a plan of approach			

the autopsy		
2: Awareness of relevant workplace health and safety considerations relevant to the performance of the autopsy		
3: Conducting an external examination and identifying abnormalities		
4: Conducting a macroscopic dissection and identification of abnormalities/antecedent pathology		
5: Undertaking and interpreting appropriate radiographic and other ancillary investigations – if required		
6: Competently perform specialized dissections		
7: Collecting appropriate evidentiary materials and preservation		
8: Dispatch of evidentiary materials maintaining chain of custody		
9: Making a diagnosis or identifying cause of death		
10: Writing an autopsy case report that correlates clinical and pathological features and discusses diagnosis/cause of death relating to underlying etiology.		
GLOBAL SUMMARY		Tick
Level at which completed elements of the PBA were performed on this occasion		
Level 0	Insufficient evidence observed to support a summary judgement	
Level 1a	Able to assist with guidance (was not familiar with all steps of procedure)	
Level 1b	Able to assist without guidance (knew all steps of procedure and anticipated next move)	
Level 2a	Guidance required for most/all of the procedure (or part performed)	
Level 2b	Guidance or intervention required for key steps only	
Level 3a	Procedure performed with minimal guidance or intervention (needed occasional help)	
Level 3b	Procedure performed competently without guidance or intervention but lacked confidence	
Level 4a	Procedure performed confidently to a high standard without any guidance or intervention	
Level 4b	As 4a and was able to anticipate, avoid and/or deal with common problems/complications	
DOPS DETAILS		
Name of Procedure:		
No. times procedure previously performed:		Emergency/Elective (please circle)
Performed in a simulated setting	Description of the simulation:	

DOPS performed while on a course Yes / No If yes, please give details:	
Difficulty of procedure: Easier than usual/Average difficulty	More difficult than usual
Trainee's signature:	Assessor's signature:

30. Check list for evaluation of teaching skill practice by Postgraduate students:

Sl. No.	Activity	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		

