



# **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

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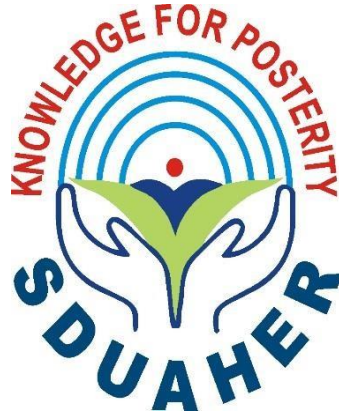
(With effect from 2019-2020 batches)

## **Competency Based Postgraduate Curriculum for Master of Surgery OBG**

  
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**

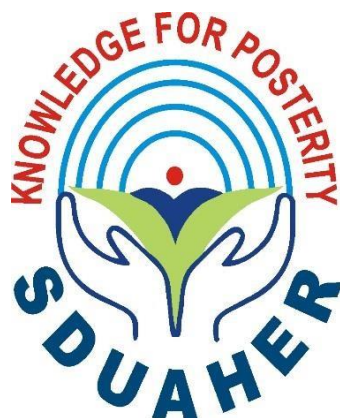


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**Comprising Sri Devaraj Urs Medical College**  
**A Deemed To Be University**

Declared under section 3 of UGC, Act,1956,  
MHRD GOI NO.F,9-36/2006-U.3(A), Dt.25<sup>th</sup> may 2007  
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**REGULATIONS AND CURRICULA**  
**FOR**  
**POST GRADUATE DEGREE PROGRAMMES**  
**IN**  
**MEDICAL SCIENCES**  
**2019-2020**



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**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



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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:**

<b>Academic Council Meetings</b>		<b>Board of Management Meetings</b>	
19 <sup>th</sup>	17.11.2014	34 <sup>th</sup>	19.06.2015
21 <sup>st</sup>	25.04.2015	36 <sup>th</sup>	04.12.2015
22 <sup>nd</sup>	18.11.2015	44 <sup>th</sup>	23.06.2017
27 <sup>th</sup>	29.04.2017	45 <sup>th</sup>	09.11.2017
28 <sup>th</sup>	04.11.2017	48 <sup>th</sup>	20.06.2018
30 <sup>th</sup>	05.05.2018	50 <sup>th</sup>	22.12.2018
31 <sup>st</sup>	03.11.2018	54 <sup>th</sup>	06.07.2019
33 <sup>rd</sup>	04.06.2019	56 <sup>th</sup>	20.12.2019
34 <sup>th</sup>	15.11.2019	59 <sup>th</sup>	09.10.2020
36 <sup>th</sup>	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 1<sup>st</sup> 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 3<sup>rd</sup> or 4<sup>th</sup> or 5<sup>th</sup> 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](http://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](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: 12<sup>th</sup> 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) checklist XII

**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 3<sup>rd</sup> 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>	
<b>TOTAL</b>		<b>700</b>

### **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 3<sup>rd</sup> or 4<sup>th</sup> or 5<sup>th</sup> 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.S. OBG**

## **Vision:**

Striving hard to provide compassionate, high quality and innovative health care service and advocacy for reproductive health care of woman of all ages by advancing knowledge through excellence and research , quality education and training of the health care providers and also through communications and collaborations.

## **Mission:**

- To transform our department to provide quality care for woman's reproductive health.
- To provide comprehensive education to medical student and resident to achieve excellence in the profession and motivate them to be life long learner.
- To provide an environment of collaboration, humility , integrity and respect for achieving excellence in profession and promotion of basic clinical and translational research.
- To strengthen the sub-speciality areas for providing high quality patient care.
- To coordinate the strength and talent of individual faculty members with the need of the department and to facilitate to collaborate individual and departmental efforts

## **Preamble:**

The purpose of PG education is to create specialists who would provide high quality health care and advance the cause of science through research & training.

The purpose of MS Obstetrics and Gynecology is to standardize Obstetrics & Gynecology teaching at Post Graduate level throughout the country . So that it will benefit in achieving uniformity in undergraduate teaching as well and creating competent Obstetrician and Gynecologist with appropriate expertise.

The purpose of this document is to provide teachers and learners illustrative guidelines to achieve defined outcomes through learning and assessment. This document was prepared by various subject-content specialists. The Reconciliation Board of Academic Committee has attempted to render uniformity without compromise to purpose and content of the document. Compromise in purity of syntax has been made in order to preserve the purpose and content. This has necessitated retention of "domains of learning" under the heading "competencies".

## Program Objectives

The **goal** of the MS course in Obstetrics and Gynecology is to produce a competent Obstetrician and Gynecologist who can:

- a) Provide quality care to the community in the diagnosis and management of Antenatal, Intra-natal and Post-natal period of normal and abnormal pregnancy and labour.
- b) Provide effective and adequate care to a pregnant woman with complicated pregnancy.
- c) Provide effective and adequate care to a normal neonate.
- d) Perform obstetrical ultrasound in normal and abnormal pregnancy including fetal Doppler.
- e) Manage effectively all obstetrical and gynaecological emergencies and if necessary make appropriate referrals.
- f) Provide quality care to the community in the diagnosis and management of gynaecological problems including screening, and management of all gynaecological cancers including during pregnancy.
- g) Conduct a comprehensive evaluation of infertile couple and have a broad based knowledge of assisted reproductive techniques including – ovulation induction, *in vitro* fertilization and intra-cytoplasmic sperm injection, gamete donation, surrogacy and the legal and ethical implications of these procedures.
- h) Provide counselling and delivery of fertility regulation methods including reversible and irreversible contraception, emergency contraception etc.
- i) Provide quality care to women having spontaneous abortion or requesting Medical Termination of Pregnancy (MTP) and manage their related complications.

## SYLLABUS

### Course Contents:

#### Paper I

- Basic Sciences as related to obstetrics & gynaecology
- Medical Genetics

#### Paper II

- Clinical obstetrics
- Diseases of New Born

#### Paper III

- Principles and practice of gynaecology and gynaecological pathology

#### PAPER IV

- Recent advances in obstetrics & gynaecology

## SYLLABUS TERM WISE (THEORY)

### OBSTETRICS

1 <sup>st</sup> term	<ol style="list-style-type: none"><li>1. Overview of Obstetrics</li><li>2. Maternal Anatomy</li><li>3. Maternal Physiology</li><li>4. Implantation and Placental Development</li><li>5. Embryogenesis and Fetal Morphological Development.</li><li>6. Amniotic Fluid .</li><li>7. Abortion</li><li>8. Physiology of Labor</li><li>9. Normal Labor</li><li>10. Vaginal Delivery</li><li>11. The Newborn</li><li>12. The Puerperium</li></ol>
2 <sup>nd</sup> term	<ol style="list-style-type: none"><li>1. Placental Abnormalities</li><li>2. Preconceptional Counseling</li><li>3. Prenatal Care</li><li>4. Ectopic Pregnancy</li><li>5. Abnormal Labor</li><li>6. Intrapartum Assessment</li><li>7. Breech Delivery</li><li>8. Operative Vaginal Delivery</li><li>9. Stillbirth</li><li>10. Puerperal Complications</li></ol>
3 <sup>rd</sup> term	<ol style="list-style-type: none"><li>1. Congenital Genitourinary Abnormalities</li><li>2. Teratology, Teratogens, and Fetotoxic Agents</li><li>3. Fetal Assessment</li><li>4. Gestational Trophoblastic Disease</li><li>5. Induction and Augmentation of Labor</li><li>6. Cesarean Delivery and Peripartum Hysterectomy</li><li>7. Prior Cesarean Delivery</li><li>8. Diseases and Injuries of the Term Newborn</li><li>9. The Preterm Newborn</li><li>10. Obstetrical Hemorrhage</li><li>11. Preterm Labor</li><li>12. Postterm Pregnancy</li></ol>
4 <sup>th</sup> term	<ol style="list-style-type: none"><li>1. Fetal Imaging</li><li>2. Obstetrical Analgesia and Anaesthesia</li><li>3. Contraception</li></ol>

	<ol style="list-style-type: none"> <li>4. Sterilization</li> <li>5. Hypertensive Disorders</li> <li>6. Multifetal Pregnancy</li> </ol>
5 <sup>th</sup> term	<ol style="list-style-type: none"> <li>1. Genetics</li> <li>2. Fetal-Growth Disorders</li> <li>3. Haematological Disorders</li> <li>4. Diabetes Mellitus</li> <li>5. Endocrine Disorders</li> <li>6. Cardiovascular Disorders</li> <li>7. Chronic Hypertension</li> <li>8. Pulmonary Disorders</li> <li>9. Haematological Disorders</li> </ol>
6 <sup>th</sup> term	<ol style="list-style-type: none"> <li>1. Prenatal Diagnosis</li> <li>2. Fetal Disorders</li> <li>3. Fetal Therapy</li> <li>4. Thromboembolic Disorders</li> <li>5. Renal and Urinary Tract Disorders</li> <li>6. Gastrointestinal Disorders</li> <li>7. Hepatic, Biliary, and Pancreatic Disorders</li> <li>8. Disorders</li> <li>9. Connective-Tissue Disorders</li> <li>10. Neurological Disorders</li> <li>11. Psychiatric Disorders</li> <li>12. Dermatological Disorders</li> <li>13. Neoplastic Disorders</li> <li>14. Infectious Diseases</li> <li>15. Sexually Transmitted Infections</li> <li>16. Fetal Sonographic Measurements</li> <li>17. Maternal Echocardiographic Measurements</li> </ol>

### GYNAECOLOGY

1 <sup>st</sup> term	<ol style="list-style-type: none"> <li>1. A Clinical Approach to Gynaecology</li> <li>2. Anatomy</li> <li>3. Ovarian Functions</li> <li>4. Menstruation and Other Cyclical Phenomena</li> <li>5. Clinical Aspects of Menstruation and Ovulation</li> <li>6. Puberty and Adolescent Gynaecology</li> </ol>
2 <sup>nd</sup> term	<ol style="list-style-type: none"> <li>1. Conception</li> <li>2. Spontaneous Abortions (Including Recurrent Loss)</li> <li>3. Ectopic Pregnancy and Pregnancy of</li> </ol>

	<p>Unknown Location</p> <ol style="list-style-type: none"> <li>4. Gestational Trophoblastic Disease</li> <li>5. Breast Function and its Disorders</li> <li>6. Development of the Urogenital System</li> <li>7. Malformations and Maldevelopments of the Genital Tract</li> <li>8. Disorders of Sexual Development, Asexuality and Intersexuality</li> <li>9. Urinary Tract Infection</li> </ol>
3 <sup>rd</sup> term	<ol style="list-style-type: none"> <li>1. Female Genital Mutilation</li> <li>2. Pelvic Organ Prolapse</li> <li>3. Other Displacements of the Uterus</li> <li>4. Torsion of Pelvic Organs</li> <li>5. Infections Including Sexually Transmitted Diseases</li> <li>6. Infections as they Affect Individual Organs</li> </ol>
4 <sup>th</sup> term	<ol style="list-style-type: none"> <li>1. Genital Tuberculosis</li> <li>2. 2.Endometriosis and Chronic Pelvic Pain</li> <li>3. 3.Tumours of the Vulva</li> <li>4. 4.Tumours of the Vagina</li> <li>5. Tumours of the Cervix Uteri</li> <li>6. Tumours of the Corpus Uteri</li> <li>7. 7.Adenomyosis Abnormal and Excessive Uterine Bleeding</li> <li>8. 8.Dysmenorrhoea</li> <li>9. 9.Premenstrual Syndrome and Other Menstrual Phenomena</li> <li>10. Hormone Therapy in Gynaecology</li> <li>11. 11.Vaginal Discharge</li> <li>12. 12.Pruritus Vulvae and Vulvodynia</li> </ol>
5 <sup>th</sup> term	<ol style="list-style-type: none"> <li>1. Polycystic Ovary Syndrome</li> <li>2. Hirsutism</li> <li>3. Epithelial Abnormalities of the Genital Tract</li> <li>4. Genital Cancers</li> <li>5. Tumours of the Fallopian Tubes</li> <li>6. Tumours of the Pelvic Ligaments</li> <li>7. Tumours of the Ovary</li> <li>8. Amenorrhoea, Hypomenorrhoea, and Oligomenorrhoea</li> </ol>
6 <sup>th</sup> term	<ol style="list-style-type: none"> <li>1. Male and Female Infertility Overview</li> </ol>

	<ol style="list-style-type: none"> <li>2. Assisted Reproductive Technology</li> <li>3. Instruments in Gynaecological Procedures</li> <li>4. Ultrasonography in Gynaecology</li> <li>5. Ultrasound in Infertility</li> <li>6. Ultrasound in Menopause</li> <li>7. Robotics Surgery</li> <li>8. Endoscopic Surgery in Gynaecology</li> <li>9. Contraception</li> <li>10. Sterilisation and Termination of Pregnancy</li> <li>11. Urinary Incontinence</li> <li>12. Menopause</li> <li>13. Hysterectomy and its Aftermath</li> <li>14. Conditions of the Lower Intestinal Tract</li> <li>15. Preoperative and Postoperative Management: Postoperative</li> <li>16. Nutrition and Exercise in Women</li> <li>17. Applications of Laser in Gynaecology</li> </ol> <p>Chapter 65: Genetics in Gynaecology</p>
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### SUBJECT SPECIFIC COMPETENCIES

#### A. Cognitive Domain

At the end of the MS Course in Obstetrics and Gynecology, the student should have acquired knowledge in the following:

1 <sup>st</sup> term	<ol style="list-style-type: none"> <li>1. Recognizes the health needs of women and adolescents and carries out professional obligations in keeping with principles of National Health Policy and professional ethics</li> <li>2. Interpretation of various laboratory investigations and other diagnostic modalities in Obstetrics &amp; Gynaecology.</li> <li>3. On elementary knowledge of female breast &amp; its diseases.</li> <li>4. On vital statistics in Obstetrics &amp; Gynaecology.</li> <li>5. Reproductive and Child Health, family welfare &amp; reproductive tract infections.</li> <li>6. STD and AIDS &amp; Government of India</li> </ol>
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	<p>perspective on women's health related issues.</p> <ol style="list-style-type: none"> <li>7. Asepsis, sterilization and disposal of medical waste.</li> <li>8. Be able to effectively communicate with the family and the community</li> <li>9. Maintain medical records properly and know the medico-legal aspects in respect of Obstetrics &amp; Gynaecology</li> <li>10. Knowledge and correct application of various Acts and Laws while practicing Obstetrics and Gynaecology, particularly MTP Act and sterilization, Preconception and P.N.D.T. Act.</li> <li>11. Knowledge of importance of proper recording of facts about history, examination findings, investigation reports and treatment administered in all patients.</li> </ol>
2 <sup>nd</sup> term	<ol style="list-style-type: none"> <li>1. Has acquired the competencies pertaining to Obstetrics and Gynaecology that are required to be practiced in the community and at all levels of health care system.</li> <li>2. On genetics as applicable to Obstetrics.</li> <li>3. On care of postmenopausal women and geriatric Gynaecology.</li> <li>4. Understands the difference between audit and research and how to plan a research project and demonstrate the skills to critically appraise scientific data and literature</li> <li>5. Acquire a full understating of all common usage of computing systems including the principles of data collection, storage, retrieval, analysis and presentation.</li> <li>6. Understand National Health Programmes related to Obstetrics and Gynaecology and should be aware of all the Acts and Laws related to speciality.</li> <li>7. Education regarding rights and confidentiality of women's health, specifically related to reproductive function, sexuality, contraception and</li> </ol>

	<p>safe abortion.</p> <ol style="list-style-type: none"> <li>8. Recognize the importance of good health of adolescent and postmenopausal women.</li> <li>9. Identification and management of health problems of post-menopausal women.</li> <li>10. Understanding , planning and intervention program of social, educational and health needs of adolescent girls and menopausal women.</li> </ol>
3 <sup>rd</sup> term	<ol style="list-style-type: none"> <li>1. On benign and malignant gynaecological disorders.</li> <li>2. Anaesthesiology related to Obstetrics &amp; Gynaecology.</li> <li>3. Medico-legal aspects in Obstetrics &amp; Gynaecology.</li> <li>4. Knowledge of steps taken in the event of death of a patient.</li> </ol>
4 <sup>th</sup> term	<ol style="list-style-type: none"> <li>1. On Gynaecological Endocrinology and infertility.</li> <li>2. On essentials of Paediatric and adolescent Gynaecology.</li> <li>3. The post graduate student should be aware of the relevant strategies to ensure confidentiality and when it might be broken.</li> <li>4. Understand quality improvement and management and how to perform, interpret and use of clinical audit cycles and the production and application of clinical standards, guidelines and protocols.</li> <li>5. Epidemiology of RTI and HIV infection in Indian women of reproductive age group.</li> <li>6. Cause, effect and management of these infections.</li> <li>7. HIV infections in pregnancy, its effects and management.</li> <li>8. Relationship of RTI and HIV with gynaecological disorders.</li> <li>9. Planning and implementation of preventive strategies.</li> </ol>

5 <sup>th</sup> term	<ol style="list-style-type: none"> <li>1. Is aware of the contemporary advances and developments in medical sciences as related to Obstetrics and Gynaecology.</li> <li>2. The post graduate student should demonstrate a working knowledge of the principles of risk management and their relationship to clinical governance and compliant procedures.</li> <li>3. Be abreast with all recent advances in Obstetrics and Gynaecology and practice evidence based medicine.</li> <li>4. Geriatric problems.</li> </ol>
6 <sup>th</sup> term	<ol style="list-style-type: none"> <li>1. Has acquired skills in educating medical and paramedical professionals</li> <li>2. The post graduate student should understand the principles and legal issues surrounding informed consent with particular awareness of the implication for the unborn child, postmortem examinations consent to surgical procedures including tubal ligation/vasectomy, parental consent and medical certification, research and teaching and properly maintain medical records.</li> <li>3. Understand the principles of adult teaching and should be able to teach common practical procedures in Obstetrics and Gynaecology and involved in educational programme in Obstetrics and Gynaecology for medical and paramedical staff.</li> <li>4. Knowledge of steps recommended for examination and management of rape cases.</li> </ol>

**B. Affective domain**

1 <sup>st</sup> term	Should be able to function as a part of a team, develop an attitude of cooperation with colleagues,
2 <sup>nd</sup> term	Should be able to interact with the patient and the clinician or other

	colleagues to provide the best possible diagnosis or opinion.
3 <sup>rd</sup> term	Always adopt ethical principles and maintain proper etiquette in dealings with patients, relatives and other health personnel.
4 <sup>th</sup> term	To respect the rights of the patient including the right to information and second opinion.
5 <sup>th</sup> term	Develop communication skills to word reports and professional opinion .
6 <sup>th</sup> term	Should be able to interact with patients, relatives, peers and paramedical staff, and for effective teaching

### C. Psychomotor domain

	OBSERVED	MUST BE DONE						
1 <sup>st</sup> term	Obstetrics : 1. Conduct normal deliveries 2. Episiotomy and its repair  Gynaecology : 1. Endometrial / cervical biopsy. 2. Dilatation and curettage	<table border="1"> <tr> <td>Assisted (A)</td> <td>Operated with assistance (O)</td> </tr> <tr> <td>Normal delivery Fetal surveillance methods - Electronic fetal monitoring and its interpretation</td> <td>Episiotomy repair</td> </tr> </table>	Assisted (A)	Operated with assistance (O)	Normal delivery Fetal surveillance methods - Electronic fetal monitoring and its interpretation	Episiotomy repair		1. Hysterosalpingography 2. Vaginal Pap Smear
Assisted (A)	Operated with assistance (O)							
Normal delivery Fetal surveillance methods - Electronic fetal monitoring and its interpretation	Episiotomy repair							
2 <sup>nd</sup> term	Obstetrics : 1. Application of forceps and ventouse (10 must be done) 2. Manual removal of placenta 3. culdocentesis  Gynaecology : 1. Culdocentesis, Colpotomy 2. Opening and closing of abdomen (10 must be done)	<table border="1"> <tr> <td>A</td> <td>O</td> </tr> <tr> <td>1.Application of forceps and ventouse (10 must be done) 2.Manual removal of placenta 3.culdocentesis 4. Fetal biophysical</td> <td>1.Episiotomy repair . conduct normal delivery</td> </tr> </table>	A	O	1.Application of forceps and ventouse (10 must be done) 2.Manual removal of placenta 3.culdocentesis 4. Fetal biophysical	1.Episiotomy repair . conduct normal delivery		
A	O							
1.Application of forceps and ventouse (10 must be done) 2.Manual removal of placenta 3.culdocentesis 4. Fetal biophysical	1.Episiotomy repair . conduct normal delivery							

		profile, 5. colposcopy	
		1. Common gynaecological pathologies. 2. Colposcopy	
3 <sup>rd</sup> term	<b>Obstetrics :</b> 1. Interpret normal and abnormal biophysical profile 2. Fetal surveillance method. 3. Carry out caesarean section delivery (10 must be done) 4. Management of genital tract obstetrical injuries. 5. Post-partum sterilization/Minilap tubal ligation (20 must be done) 6. Medical termination of pregnancy - various methods <b>Gynaecology :</b> 1. Assisted Operations for pelvic organ prolapse 2. Assisted Ovarian cyst operation 3. Assisted Operation for ectopic pregnancy 4. Assisted Vaginal and abdominal hysterectomy	<b>A</b> Operation of ectopic pregnancy Operation of pelvic organ prolapse. Vaginal and abdominal hysterectomy.	<b>O</b> Opening and closing abdomen
4 <sup>th</sup> term	Obstetrics Management of genital tract injury	<b>A</b> LSCS Laprosopy Hysteroscopy	<b>O</b> Open and close the abdomen
5 <sup>th</sup> term	Provide education to adolescent and post menopausal women Documentation of PCPNDT , MLC	<b>A</b> Ovarian cyst operation Vaginal , abdominal hysterectomy	<b>O</b> LSCS Endometrial . cervical biopsy
6 <sup>th</sup> term	Documentation of PCPNDT , MLC Counsel the high risk pregnancy	Internal podalic version Hysterotomy Tubal surgery Repair of fistula Myomectomy	LSCS independently Colposcopy HSG

### **Competency Domains**

MK- Medical Knowledge, PC – Patient Care , PBLI- Problem Based Learning and Improvement , SBP – Systems Based Practice, P – Professionalism, ISC- Interpersonal and communication skills

### **Levels of Competency**

Level I – knowledge only, can observe supervision, Level II – can do under direct supervision, Level III- Can do under indirect supervision, Level IV – can do independently, Level V – has expertise to teach others

**Assessment:** Mini CEX/ DOPS/ OSCE/ OSPE/ Audit

### **EPA 1: Gather a history and perform a physical examination**

#### **Pre- entrustable**

- Misses pertinent positive or negative details that would assist with problem solving and determining the differential diagnosis when obtaining data
- Is disorganized in his/her history taking skills which is not appropriately detailed
- Performs a physical examination which is disorganized or missing components relevant to the clinical case
- Fails to establish rapport with the patient/ family /caregiver/ advocate, leading to missed data within the history or physical examination

#### **Entrustable**

- Obtains the appropriate data from the patient (family/caregiver/ advocate) for the specific patient encounter
- Establishes a rapport with the patient (family/ caregiver/ advocate)
- Performs a physical exam appropriately tailored to the clinical case
- Demonstrates specific physical exam skills appropriate to the patient case
- Integrates all these elements along with other sources of information

### **EPA 2: Prioritize a differential diagnosis following a clinical encounter** Pre-entrustable

- Relies on limited aspects of his/her assessment to generate the differential diagnosis, failing to integrate elements across the history, physical examination, and investigative studies
- Identifies one or two sensible diagnostic possibilities for clinical presentations, but misses important, common diagnoses
- Has trouble identifying the most likely etiology when a differential diagnosis is generated
- Selects differential diagnoses which typically lack adequate justification and prioritization
- Does not routinely consider determinants of health in generating or prioritizing the differential diagnosis
- **Entrustable**
- Lists diagnostic possibilities by integrating elements from the history, physical examination, and investigative studies
- Identifies the major diagnostic possibilities for common clinical presentations

- Justifies and prioritizes a most likely diagnosis based on information from his/her clinical assessment
- Incorporates major determinants of health for the patient when generating and prioritizing the differential
- Balances the tendency to be too all encompassing yet avoids errors of premature closure

### **EPA 3: Recommend and interpret common diagnostic and screening tests**

#### **Pre-entrustable**

- Is unable to recognize significant urgent or abnormal results or common normal variations in results
- Is unable to form a preliminary opinion about the significance of results
- Does not communicate significant normal or abnormal results in a timely manner to other team members
- Is unable to summarize and/or interpret the meaning of results to other team members
- Does not communicate results in a clear manner to patients (family/caregiver/advocate)
- Does not seek help to interpret results when necessary

#### **Entrustable**

- Recognizes significant urgent or abnormal results
- Distinguishes between common normal variations in results and abnormal results
- Formulates an appropriate preliminary opinion about the potential clinical impact of results
- Communicates significant results in a timely and appropriate manner to other team members
- Summarizes and interprets the meaning of the results to other team members
- Communicates results in a clear manner to patients (family/caregiver/advocate)
- Seeks help to interpret results when necessary

### **EPA 4: Obtain informed consent for tests and / or procedures**

#### **Key Features:**

- This EPA focuses on the communication that occurs with patients and families to inform and discuss plans for surgical care

#### **Assessment plan:**

Direct observation by supervisor

Use Form 1. Form collects information on:

- Type of procedure: emergency; elective
- Setting: clinical; simulation
- Collect 3 observations of achievement
- At least 2 different assessors

- At least one emergency procedure
- At least one elective procedure
- At least two in clinical setting

**Relevant milestones**

- Work with patients and their families to understand relevant options for care
- Ensure that the patient and family are informed about the risks and benefits of each treatment option in the context of best evidence and guidelines, addressing fears and concerns
- Discuss clinical uncertainty with the patient and family
- Obtain informed consent for commonly performed procedures and therapies, under supervision
- Assess patients' decision-making capacity
- Apply standardized care paths, including patient education components
- Optimize the physical environment for patient comfort, privacy, engagement, and safety
- Manage challenging conversations
- Encourage discussion, questions, and interaction to validate understanding during the encounter
- Plan and discuss appropriate post-operative, immediate and/or long-term care and issues with patients and families as appropriate
- Communicate with cultural awareness and sensitivity
- Document information about patients and their medical conditions in a manner that enhances intra- and inter professional care
- Select patient education resources related to surgical practice
- Recognize and respond appropriately in situations where consent is obtained under constraints of emergency circumstances
- Manage conflicts of interest related to surgical care, including consent issues related to the duality of the learner as surgeon

**EPA 5: Recognize a patient requiring urgent or emergent care and initiate evaluation and management**

Key Features:

- This EPA focuses on the initial approach to a critically ill patient; at this early stage of training, an important feature of this task is recognizing one's own limits and seeking assistance and/or handing over care to ensure safe patient management
- This EPA may be observed in simulation (e.g. OSCE)

Assessment plan:

Direct observation by supervisor and review of clinic note

Use Form 1. Form collects information on:

- Type of scenario: clinical; simulated

Collect 2 observations of achievement

Relevant milestones

- Recognize own limits and seek assistance when necessary

- Perform initial resuscitation according to ACLS guidelines
- Elicit a history and perform a physical exam that informs the diagnosis
- Develop a differential diagnosis and adjust as new information is obtained
- Select necessary initial investigations to assist in diagnosis and management
- Identify the potential need for consultation
- Mitigate physical barriers to communication to optimize patient comfort, privacy, engagement, and safety
- Seek and synthesize relevant information from other sources, including the patient's family, hospital records and other health care professionals, with the patient's consent
- Receive and appropriately respond to input from other health care professionals
- Communicate effectively with other physicians and health care professionals
- Perform safe and effective handover during transitions in care
- Recognize the duality of being a learner as well as a practitioner
- Consistently prioritize the needs of patients and others to ensure a patient's legitimate needs are met

**EPA 6: Give or receive a patient handover to transition care responsibility**

Key Features:

- This EPA focuses on the transitions of care that occur between residents and/or at times of patient transfer to another health care setting or location.
- Key aspects of this task include accurate and effective communication as well as professionalism in the use of medical information technology and/or social media

Assessment plan:

Direct observation by supervisor

Use Form 1.

Collect 2 observations of achievement

Relevant milestones

- Identify patients at risk for sudden deterioration in clinical status requiring closer follow-up
- Discuss with the patient and family any plan for involving other health care professionals, including other physicians, in the patient's care
- Describe specific information required for safe handover during transitions in care
- Acknowledge that incomplete or inaccurate handover can result in suboptimal patient care, if not harm
- Communicate with the receiving physicians or health care professionals during transitions in care
- Perform safe and effective handover during transitions in care
- Demonstrate an understanding of the appropriate use of information technology to enhance surgical practice
- Describe the risks of technology enabled communication in surgical practice including but not limited to social media

## **EPA 7: Undertake complete patient monitoring including the preoperative and post-operative care of the patient**

### Key Features:

- This EPA includes selecting/reviewing relevant investigations, optimizing any pre-operative risk factors and preparing the patient for surgery

### Assessment plan:

Direct or indirect observation by supervisor

Use Form 1. Form collects information on:

- Surgical priority: elective; emergent
- Patient risk category: low; moderate; high; critically ill

Collect 4 observations of achievement

- At least one elective, one emergent
- At least one high risk
- At least one critically ill
- At least 2 assessors

### Relevant milestones

- Apply clinical and biomedical sciences to manage core patient presentations in surgical practice
- Perform focused clinical assessments with recommendations that are well-documented
- Develop a specific differential diagnosis relevant to the patient's presentation
- Select and/or interpret appropriate investigations and/or imaging with sufficient attention to clinical details
- 5) Develop and implement plans for pre-operative optimization of patients
- Use appropriate prophylaxis
- Describe the indications, contraindications, risks, and alternatives for a given procedure or therapy
- Obtain informed consent for commonly performed procedures and therapies, under supervision
- Assess patients' decision-making capacity
- Consider urgency and potential for deterioration, in advocating for the timely execution of a procedure or therapy
- Coordinate investigation, treatment, and follow-up plans when multiple physicians and healthcare professionals are involved
- Use cognitive aids such as procedural checklists, structured communication tools, or care paths, to enhance patient safety
- Encourage discussion, questions, and interaction to validate understanding during the encounter
- Use strategies to verify and validate the understanding of the patient and family with regard to the diagnosis, prognosis, management plan and/or discharge plan
- Document clinical encounters to adequately convey clinical reasoning and the rationale for decisions

- Collaborate with other health care providers and all involved parties in booking the case including but not limited to ICU, Step down unit, or OR
- Integrate the patient's perspective and context into the collaborative care plan
- Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients • Counsel regarding risk factors to health o smoking cessation
- Counsel regarding opportunities for health and wellness
- Advocate for vulnerable and marginalized patients
- Advocate for appropriate screening and facilitate process
- Demonstrate the ability to be objective in treating patients regardless of their socioeconomic status or other factors
- Describe the tension between the physician's role as advocate for individual patients and the need to manage scarce resources

## **COURSE SPECIFIC EPA'S**

### **Obstetrics**

1. Diagnosis of early pregnancy and its complication and management.

**SETTING-** OPD, Emergency care unit, ANC ward.

**Description** : This EPA includes the following :

- interacting with the patient/relatives/team members.
- elicit, interpret history, examination and evaluation, clinical and lab evaluation of the patient.
- arrive at diagnosis and make differential diagnosis.
- plan and execute treatment of the condition.
- working in team with other medical personnel/ HCW.
- Documentation/ Record keeping.

**Competencies required** : This EPA requires an integration of the following competencies, each further compartmentalized in several milestones:

2. AIM of ANC and management of high risk pregnancies.

**Characteristics-**Executable independently, observable, measurable, essential to perform, reflects competencies, focused tasks.

**SETTING-** OPD, Emergency care unit, ANC ward

**Description:** This EPA includes the following:

- interacting with the patient/relatives/team members.
- elicit, interpret history, examination and evaluation, clinical and lab evaluation of the patient.
- arrive at diagnosis and make differential diagnosis.

**Competencies required:** This EPA requires an integration of the following competencies, each further compartmentalized in several milestones

3. To work in labour wards and to manage normal deliveries.

**SETTING-** Labor ward

Description: This EPA includes the following:

interacting with the patient/relatives/team members.

- elicit, interpret history, examination and evaluation, clinical and lab evaluation of the patient.
- arrive at diagnosis and make differential diagnosis.
- Fetomaternal monitoring
- NST interpretation
- First assistant to conduct a normal delivery and suturing an episiotomy.

**Competencies required:** This EPA requires an integration of the following competencies, each further compartmentalized in several milestones

4. To assist as second assistant for first 6 months for Caesarean section

**SETTING-** Major OT

Description: This EPA includes the following:

As second assistant for caesarean section.

**Competencies required:** This EPA requires an integration of the following competencies, each further compartmentalized in several milestones

**Gynaecology**

1. To work in OPD and examine Gynaecology cases routinely

**SETTING-** OPD

Description: This EPA includes the following:

- Interacting with the patient/relatives/team members.
- Elicit, interpret history, examination and evaluation, clinical and lab evaluation of the patient.
- Arrive at diagnosis and make differential diagnosis.

**Competencies required:** This EPA requires an integration of the following competencies, each further compartmentalized in several milestones

2. Minor operations: To assist in the beginning and carry out work independently by the end of 1 year.

**SETTING-** Minor OT, OPD

Description: This EPA includes the following:

- interacting with the patient/relatives/team members.
- To take consent for procedure.
- To assist minor procedures like D & C, biopsy, pap smear, HSG.

**Competencies required:** This EPA requires an integration of the following competencies, each further compartmentalized in several milestones.

3. To assist as second assistant for the first 6 months for major surgeries.

**SETTING-** Major OT

Description: This EPA includes the following

As second assistant for major procedures like hysterectomy.

**Competencies required:** This EPA requires an integration of the following competencies, each further compartmentalized in several milestones.

**Basic skills and ward Procedures.**

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

**LABOUR ROOM PROCEDURES**

	Procedure	Semester					
		I	II	III	IV	V	VI
1	Assisting to conduct normal delivery	O/A	PI	PI	PI	PI	PI
2	Assisting episiotomy wound suturing	O/A	PI	PI	PI	PI	PI
3	Management of PPH	O/A	PI	PI	PI	PI	PI
4	Management of eclampsia	O/A	PI	PI	PI	PI	PI

O- OBSERVED , A –ASSISTED , PI- PERFORMED INDEPENDENTLY .

**WARD procedures**

	Procedure	Semester					
		I	II	III	IV	V	VI
1	Start I.V lines and monitor infusions.	O/A	PI	PI	PI	PI	PI
2	Insertion of urinary catheters etc.,	O/A	PI	PI	PI	PI	PI
3	Removal of tubes and drains.	O/A	PI	PI	PI	PI	PI
4	Start and monitor blood transfusion.	O/A	PI	PI	PI	PI	PI
5	Routine wound dressings.	O/A	PI	PI	PI	PI	PI
6	Communication skills with the patients, relatives , colleagues and paramedical staff.	O/A	PI	PI	PI	PI	PI
7	Ordering of the requisite laboratory and radiological investigations and interpretation of reports in light of clinical picture.	O/A	PI	PI	PI	PI	PI
8	Universal precautions against the communicable diseases.	O/A	PI	PI	PI	PI	PI
9	Conduct CPR( Cardiopulmonary resuscitation ) in emergencies	O/A	PI	PI	PI	PI	PI

## Post-operative care

	Procedure	Semester					
		I	II	III	IV	V	VI
1	Airway management	O	A	PA	PI	PI	PI

## TEACHING AND LEARNING METHODS

### Postgraduate Training

**Teaching methodology** should be imparted to the students through:

- Lectures, seminars, symposia, Inter- and intra- departmental meetings (Clinicopathological, Radio-diagnosis, Radiotherapy, Anaesthesia, Paediatrics/ Neonatology), maternal morbidity/mortality meetings and journal club. Records of these are to be maintained by the department.

#### Monthly

- Journal club - 4
- Seminars – 4
- Case discussion – 3
- Clinico-pathological case discussion – 1
- Interdepartmental meet – 1
- Pedagogy 4
- Perinatal mortality audit held on the first Tuesday of every month

#### A. **Peripheral posting**– for 8 weeks

##### i. **Neonatology** - 2 weeks

Objectives:

At the end of 2 weeks of posting in the department of Pediatrics, the PG student should be able to:

1. Perform newborn examination and care of new born including assessment of gestational age and recognize congenital anomalies.
2. Independently resuscitate asphyxiated newborns.
3. Diagnose and manage common ne
4. Neonatal problems such as jaundice, sepsis, seizures, etc.
5. Take care of preterm babies.
6. Advice regarding prevention of maternal to child transmission of HIV.
7. Manage babies in Neonatal Intensive Care Unit by acquiring skills such as starting IV line, collection of blood samples and management of babies on ventilator.

Assessment:

1. Seminar

2. OSCE

##### ii. **Anesthesia** - 2 weeks

**Objectives:**

At the end of 2 weeks of postings in the department of Anesthesiology the PG students should be able to:

1. Enumerate the indications and side effects of different anaesthetic agents used.
2. Describe the techniques of anesthesia and selection of type of anesthetic agents and sedatives
3. Insert IV lines and monitor central venous pressure
4. Perform endotracheal intubation
5. Provide basic life support and advanced life support systems care
6. Describe various support measures for ventilation
7. Collect samples for arterial blood gas (ABG) analysis and interpret the report.
8. Describe the principles of labour analgesia and perform 5 spinal anesthesia procedures.

Assessment:

1. Seminar
2. OSCE
- iii. **Radiology** - 2 weeks

Objectives:

At the end of 2 weeks of postings in the department of Radiology the PG students should be able to:

1. Perform and interpret basic ultrasound in pregnancy.
2. Interpret Doppler studies in high risk pregnancies.
3. Describe the indications and interpret Computerized Tomographic, Magnetic Resonance Images and X-rays in different obstetrics and gynecological conditions.

**Assessment:**

1. Seminar
2. OSCE

iv. **Surgery** - 2 weeks

Objectives:

At the end of 2 weeks of rotation postings in the department of surgery the PG students should be able to:

1. To know basic surgical skills such as surgical knotting, suture material, suturing techniques.
2. To diagnose bowel and bladder injury, surgical repair of the same
3. To diagnose and manage benign breast disease

**Assessment:**

1. Seminar
2. OSCE

v. **Oncology** - 2 weeks

Objectives:

At the end of 4 weeks of posting in Gynaec- Oncology, the students will be able to:

1. Describe the etiology pathophysiology, principles of diagnosis and management of cancer cervix, endometrium, ovary chorio-carcinoma and other Gynaecological carcinomas.
2. Interpret the results of specific investigations like MRI (Magnetic Resonance Imaging) CT (Computerized Tomography) and ultrasound for diagnosis of Gynaecological malignancy.
3. Outline the management of common Gynaecological malignancies as per the stage of disease.
4. Assist a minimum of 10 cases operated during their postings.
5. Assist and perform colposcopic examinations and therapeutic procedures like LEEP, Cryocautery, to diagnose and treat premalignant condition of female genital tract.
6. Describe the principles of management of radiotherapy in treatment of various Gynaecological cancers.
7. Observe brachytherapy procedures for treatment of cancer cervix.
8. Describe the principles of chemotherapy in the management of Gynaecological cancer.
9. Describe the palliative therapies for the treatment of inoperable gynecological cancers.
10. Develop communicative and counselling skills regarding management of various Gynaecological malignancies and their long term effects including end stage disease.

**Assessment:**

1. Seminar
2. OSCE

Labor Room – 6 months, 2 months in each year

Objectives for each posting are defined prior to the posting.

**ASSESSMENT**

Formative assessment, during the training should be continual and should assess medical knowledge by using Entrustable Professional Activities (EPAs), Patient care, procedural & academic skills, interpersonal skills, professionalism, self-directed learning and ability to practice in the system.

PG teaching

General Principles

Internal Assessment should be frequent, cover all domains of learning and used to provide feedback to improve learning; it should also cover professionalism and communication skills. The Internal Assessment should be conducted in theory and clinical examination.

The student to be assessed periodically as per categories listed in postgraduate student appraisal form (Annexure I).

## SUMMATIVE ASSESSMENT

### Assessment at the end of training

The summative theory and practical examination would be carried out at the end of 3 years.

### Postgraduate Examination shall be in three parts:

#### 1. Theory Examination:

The examinations shall be organized on the basis of 'Grading' or 'Marking system' to evaluate and to certify post graduate student'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 MS shall be held at the end of 3<sup>rd</sup> academic year. An academic term shall mean six month's training period.

There should be four theory papers, as given below:

**Paper I:** Applied Basic sciences.

**Paper II:** Obstetrics including social obstetrics and Diseases of New Born

**Paper III:** Gynecology including fertility regulation

**Paper IV:** Recent Advances in Obstetrics & Gynecology

#### 3. Clinical/Practical & oral/viva voce Examination: shall be as given below:

OBSTETRICS			GYNAECOLOGY				
LONG CASE	SHORT CASE	TOTAL	LONG CASE	SHORT CASE	TOTAL	CLINICAL TOTAL	VIVA
75	25	100	75	25	100	200	100
<b>Theory total marks- 400</b>							
<b>Practical total marks- 200</b>							
<b>Viva voce- 100</b>							

#### Dissertation:

- Dissertation will be reviewed every 6 months once.
- Dissertation must be submitted six months before the Theory and Clinical / 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 Clinical examination.
- A post graduate student shall be allowed to appear for the Theory and Practical/Clinical examination only after the acceptance of the Dissertation by the examiners.

A post graduate student shall be allowed to appear for the Theory and Practical/Clinical examination only after (i) presented one poster (ii) read one paper at National/State conference and presented one research paper which has been published/accepted for publication/sent for publication during period of their postgraduate study period.

### **Recommended Reading:**

#### **Books (latest edition)**

##### **Obstetrics**

1. William Textbook of Obstetrics
2. High risk Obstetrics - James
3. High risk pregnancy - Ian Donald
4. Text book of Operative Obstetrics - Munro Kerr.
5. Medical disorder in pregnancy - De Sweit
6. High risk pregnancy - Arias
7. A text book of Obstetrics - Thurnbull
8. Text book of Obstetrics - Holland & Brews.
9. Manual of Obstetrics - Daftary & Chakravarty

##### **Gynaecology**

1. Text book of Gynecology - Novak
2. Text book of Operative Gynecology - Te-lindes
3. Text book of operative gynecology - Shaws
4. Text book of Gynecology and Reproductive Endocrinology - Speroff
5. Text book of Obstetrics & Gynecology - Dewhurst
6. Manual of Gynecological Oncology - Disai
7. Text book of Gynecology – Jeffcott

##### **Journals**

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

**Postgraduate Students Quarterly assessment of Form**

**MS OBSTETRICS AND GYNECOLOGY**

**Name of the Department/Unit:**

**Name of the PG Student:**

**Period of Training: FROM.....TO.....**

SL 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 interdepartmental learning activity				
5.	External and Outreach Activities / CMEs				
6.	Thesis / Research work				
7.	Log Book Maintenance				
8.	Theory marks				

**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.**

**SIGNATURE OF ASSESSEE**

**SIGNATURE OF CONSULTANT**

**SIGNATURE OF HOD**

**EDAGOGY CHECKLIST**

Rating Scale: A- Well done: B- Done fairly: C- Needs to improve: D – Not Applicable

Directions: please enter ratings as A, B, C or D in the boxes

Name of the Postgraduate:

Title

Skill	Postgraduates action	Postgraduates Performance								
		1	2	3	4	5	6	7	8	9
1. Set induction	1.1 Aroused interest in the beginning by relation to previous learning, throwing new idea, questioning, etc.									
	1.2 Specified the objectives of presentation.									
2. Planning	2.1 Organized material in logical sequence.									
	2.2 Used relevant content matter.									
3. Presentation	3.1 Changed the pace of presentation by shifting emphasis, jokes etc.									
	3.2 Used specific example to illustrate main ideas.									
	3.3 Used non – verbal cues, eye contact, etc.									
4. Pupil Participation	4.1 Allowed questions from									

	students. 4.2 Asked question. 4.3 Solicited / raised questions 4.4 Rewarded pupil effort.									
5. Use of AV aids	5.1 Used proper AV aids. 5.2 Used the aid(s) effectively.									
6. Closure	6.1 Summarized most important points at the end of lesson.									
7. Lesson on the whole was effective										

For additional Comments use the reverse side  
Remarks:

Postgraduate 1:
Postgraduate 2:
Postgraduate 3:
Postgraduate 4:
Postgraduate 5:
Postgraduate 6:
Postgraduate 7:

Postgraduate 8:

Postgraduate 9:

### OSCE CHECKLIST

1	GREET THE PATIENT AND INTRODUCE YOURSELF	1/2			
2	TAKE VERBAL CONSENT AND PLACE THE PATIENT IN DORSAL POSITION	1/2			
3	MAKE SURE BLADDER IS EMPTY	1/2			
4	WASH HANDS AND WEAR GLOVES UNDER ASEPTIC CONDITIONS	1/2			
5	SEPARATE THE LABIA TO VISUALISE THE URETHRA , CLEAN WITYH BETADINE SWAB , USE XYLOCAINE GEL	1/2			
6	HANDLE THE FOLEYS WITHOUT TOUCHING TIP AND INSERT	1/2			
7	CONNECTED UROBAG	1/2			
8	INFLATE BULB	1/2			
9	WITHDRAW AND FIX THE CATHETER	1/2			
10	THANK THE PATIENT	1/2			

### OBSTERTIC DRILL CHECKLIST

<b>Participants call for help/ back-up</b>		
<b>Participants call for help in a timely manner</b>		
<b>Appropriate history taking</b>		
<b>Vital signs measurement</b>		
<b>Abdominal examination</b>		
<b>Pelvic examination</b>		
<b>Admit obstetrics client to obstetrics ward</b>		
<b>Early diagnosis</b>		
<b>Patient attenders counseled regarding patients condition</b>		
<b>Other positive actions/comments</b>		
<b>Other areas for improvement/comments</b>		

MINI-CEX- OBG-POST GRADUATE ASSESSMENT  
DEPARTMENT OF OBG, SRI DEVARAJ URS MEDICAL COLLEGE, SDUAHER,  
TAMAKA, KOLAR

\*Required

Email address \*

NAME OF ASSESSOR\*

*Mark only one oval.*

- DR SHEELA S R (Prof & HOD)
- DR GOMATHY E(Prof)
- DR VIMARSHITHA P (Assistant Professor)

ASSESSOR EMAIL ID\*

POST GRADUATE-RESIDENT: YEAR OF TRAINING \*

*Mark only one oval.*

- 1st year
- 2nd year
- 3rd year

LOCATION \*

*Mark only one oval.*

- WARD
- OUT PATIENT
- DEPARTMENT
- LABOUR
- ROOM
- OPERATION THEATRE

SHIFT TIME\*

*Mark only one oval.*

- DAY
- EVENING
- NIGHT

**SHIFT DAY\***

*Mark only one oval.*

WEEK DAY

WEEK END

**DATE \***

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*Example: 7 January 2019*

**TIME \***

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*Example: 8.30 a.m.*

**CLINICAL ENCOUNTER**

**FOCUS OF CLINICAL ENCOUNTER\*** *Mark only one oval.*

HISTORY

PHYSICAL EXAMINATION

DIAGNOSIS

MANAGEMENT

EXPLANATION

**COMPLEXITY OF CASE\***

*Mark only one oval.*

LOW

AVERAGE

HIGH

**HISTORY TAKING:** Elicits history and allows patient to elaborate Asks relevant clinical questions Current treatment, allergies Past medical history and family history Social history inc. risk factors \*

*Mark only one oval.*

- NOT COMPETENT
- COMPETENT
- EXCELLENT
- NOT OBSERVED/NOT APPLICABLE

**PHYSICAL EXAMINATION:** Obtains verbal consent for physical examination  
Performs examination appropriately and competently Uses relevant instruments  
in a competent manner \*

*Mark only one oval.*

- NOT COMPETENT
- COMPETENT
- EXCELLENT
- NOT OBSERVED/NOT APPLICABLE

**COMMUNICATES** to patients (and their family) about procedures, potentialities  
and risks to encourage their participation in informed decision-making \*

*Mark only one oval.*

- NOT COMPETENT
- COMPETENT
- EXCELLENT
- NOT OBSERVED/NOT APPLICABLE

**ADJUSTS MANNER OF COMMUNICATION** with patients for **CULTURAL** and  
**LINGUISTIC** differences and **EMOTIONAL** status \*

*Mark only one oval.*

- NOT COMPETENT
- COMPETENT
- EXCELLENT
- NOT OBSERVED/NOT APPLICABLE

**RECOGNISES** what constitutes ‘bad news’ for patients (and their family) and  
communicates accordingly \*

*Mark only one oval.*

- NOT COMPETENT
- COMPETENT
- EXCELLENT
- NOT OBSERVED/NOT APPLICABLE

RECOGNISES the symptoms of, accurately diagnoses, and manages common problems \*

*Mark only one oval.*

- NOT COMPETENT
- COMPETENT
- EXCELLENT
- NOT OBSERVED/NOT APPLICABLE

PROFESSIONALISM: Checks patient's name and gives name Responds appropriately to patient perspectives\*

*Mark only one oval.*

- NOT COMPETENT
- COMPETENT
- EXCELLENT
- NOT OBSERVED/NOT APPLICABLE

ORGANISATION/EFFICIENCY \*

*Mark only one oval.*

- NOT COMPETENT
- COMPETENT
- EXCELLENT
- NOT OBSERVED/NOT APPLICABLE

PATIENT OPINION "Would you be comfortable with this Post Graduate Resident looking after you if they were a recently qualified doctor" \*

*Mark only one oval.*

NOT COMFORTABLE

YES I WOULD

**OVERALL CLINICAL CARE\***

*Mark only one oval.*

NOT COMPETENT

COMPETENT

EXCELLENT

NOT OBSERVED/NOT APPLICABLE

**ASSESSOR FEEDBACK**

**AREA OF GOOD PERFORMANCE (0/50 WORDS) \***

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**AREA FOR IMPROVEMENT (0/50 WORDS)\***

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**PATIENT FEEDBACK**

**What was particularly good about how the Post Graduate Resident communicated and behaved towards you? \***

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How could the Post Graduate Resident improve the way that they communicated and behaved towards you? \*

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**ENTRUSTABLE PROFESSIONAL ACTIVITY**

Assessor please indicate one only

**SELECT ENTRUSTABLE PROFESSIONAL ACTIVITY** \* *Mark only one oval.*

- EPA 1: Gather a history and perform a physical examination
- EPA 2: Prioritize a differential diagnosis following a clinical encounter
- EPA 3: Recommend and interpret common diagnostic and screening tests
- EPA 4: Obtain informed consent for tests and / or procedures
- EPA 5: Recognize a patient requiring urgent or emergent care and initiate evaluation and management
- EPA 6: Give or receive a patient handover to transition care responsibility
- DEPARTMENT SPECIFIC EPA

**PERFORMANCE LEVEL\***

*Mark only one oval.*

- NOT YET PERFORMING AT LEVEL EXPECTED
- PERFORMS AT LEVEL EXPECTED
- EXCELLENT

**POST GRADUATE ACTION PLAN**

**POST GRADUATE ACTION PLAN\***

*Mark only one oval.*

- Feedback of PG
- Feedback of Assessor

FEED BACK OF ASSESSOR REGARDING MINI-CEX \*

*Mark only one oval.*

1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			

TIME DURATION FOR OBSERVATION IN MINUTES \*

TIME DURATION FOR FEEDBACK IN MINUTES \*

