**STUDY GUIDE FOR OBSTETRICS AND GYNAECOLOGY FOR MBBS STUDENTS**

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**INTRODUCTION**

Medical education consists of basic medical education, postgraduate medical education, and continuing professional development. Medical education is a dynamic process that commences with basic medical education under the guiding principles of PMC and continues until a physician retires from active practice. Its goal is to prepare physicians to apply the latest scientific knowledge to promote health, prevent and cure human disease and mitigate symptoms. It is to ensure that medical students have acquired the knowledge, skills, and professional behaviors that prepare them for a spectrum of career choices, including, but not limited to, patient care, public health, clinical or basic research, leadership, management and medical education. The cognitive skills of self-directed learning, critical thinking, and medical problem solving should be introduced early in the medical curriculum to prepare students for clinical training. This study guide will give an insight to the students about all these competencies and how to plan their educational activities in the subject of Obstetrics & Gynaecology for the two years period.

**TARGET AUDIENCE**

2nd, 4TH and 5th year MBBS students

**DURATION OF COURSE**

Total hours 301 allocated in three years.

(27 hours in 3rd Year + 72 hours in 4th year + 202 hours in 5th year)

**LEARNING OBJECTIVES *(knowledge, skills, attitude)***

1. To equip the students with specific knowledge, essential skills and appropriate attitude towards the human body
2. To become problem solvers, dealing effectively with familiar and unfamiliar problems
3. To become lifelong learners
4. To direct their own learning and evaluate this activity
5. To be able to reason critically and make justifiable decisions regarding patient management
6. To practice evidence-based medicine
7. To ensure patient safety
8. To ensure compliance with the legal system as it impacts health care and the PM&DC regulations
9. To adopt a multidisciplinary approach for health promoting interventions
10. Medical graduates should be able to demonstrate professional values of self and professional accountability, honesty, probity, and ethics
11. Medical graduates are expected to demonstrate exemplary professional conduct
12. To be able to understand the pathogenesis of specific obstetric and gynaecological diseases
13. To be able to take a focused history and identify the patient’s risk factors related to the obstetric and gynaecological disease process
14. To be able to perform a physical examination on a patient, to diagnose specific obstetric and gynaecological diseases.
15. To formulate a provisional diagnosis with justification, and the likely differential diagnoses
16. To be able to select appropriate biochemical investigations and interpret their reports to confirm the diagnosis
17. To be able to select specific radiological investigations for specific obstetric and gynaecological diseases
18. To be able to apply evidence-based medicine concepts for the treatment of obstetric and gynaecological diseases
19. To be able to describe the required operative procedures for different obstetric and gynaecological disease process

**TEACHING METHODOLOGIES**

1. Interactive Lectures
2. Tutorials
3. Essential Skills to be learned in the skills lab
4. Teaching of surgical procedures in Operation theatres
5. Clinical ward rotations / bedside teaching
6. CPC’s – using modern audio-visual techniques, distant learning using electronic devices and current Information technology facilities
7. Maternity ward duties
8. Self-directed learning is the most vital part to solve problematic cases, go through different learning resources and discuss with peers and the faculty to clarify difficult concepts

**ATTENDANCE REQUIREMENT**

1. Students are expected to attend all scheduled teaching sessions and examinations
2. Attendance in lectures, tutorials, and wards is mandatory. Absence from these sessions will make the students ineligible to sit the final summative assessment.
3. A minimum of 90 % attendance in the lectures, wards is mandatory to appear in the summative UHS examination
4. Absence due to illness must be certified appropriately by the General Physician

**SYLLABUS (OBSTETRICS)**

1. Introduction.

2. Obstetric history taking and examination.

3. Conception, implantation and development of placenta,

 fetal circulation, abnormalities of placenta.

4. Foetal skull and bony pelvis.

5. Diagnosis of pregnancy.

6. Physiological changes associated with pregnancy.

7. Ante-natal care.

8. Physiology of labour.

9. Mechanism of labour.

10. Management of labour.

11. Complications of 3rd stage of labour.

12. Abnormal labour e.g. Prolonged labour/obstructed labour.

13. Pre-term labour.

14. Induction of labour.

15. Pre-maturity.

16. Post-maturity.

17. Conduction of normal delivery.

18. Operation delivery.

19. Forceps delivery.

20. Vacuum delivery.

21. Caesarean section.

22. Ante-partum haemorrhage.

23. Hydramnios.

24. Hyperemisis gravidarum.

25. Medical Disorder associated with pregnancy e.g.

- Pregnancy with anaemia

- Pregnancy with heart disease

- Pregnancy with diabetes

26. Hypertensive disorders of pregnancy e.g.

- PET

- Eclampsia

- Essential hypertension

27. Obstetric shock.

28. Intra uterine growth retardation and its management.

29. Fetal distress and its management.

30. Fetal Monitoring.

31. Fetal presentations.

32. Breech presentation.

33. Occipito posterior position.

34. Brow presentation.

35. Face presentation.

36. Cord prolapse/compound presentation.

37. Transvese lie/unstable lie.

38. Multiple pregnancy.

39. Puerperium (normal and abnormal).

40. Examination of the new-born baby.

41. Resuscitation of new-born.

42. Minor problems of the new-born.

43. Breast feeding and its importance.

44. Obstetric injuries/ruptured uterus.

45. Haematological disorder of pregnancy e.g.

- Rh incompatibility

- Thalassemia major/minor

**Practical:**

Log Book of 20 assisted deliveries.

**RECOMMENDED BOOKS:**

1. Obstetrics by Ten Teachers by Louise C. Kenny & Jenny E Myers. 20th edition, 2017.
2. Hacker & Moore’s Essentials of Obstetrics and Gynecology by Neville F. Hacker, Joseph C. Gambone, Calvin J, Hobel, 6th ed. 2015.
3. Notes on Obstetrics & Gynecology. Stirrat, Mills, Draycott. 5th Ed. 2003.
4. Fundamentals of Obstetrics by Arshad Chohan, 2021.
5. Online Journals and Reading Materials through HEC Digital Library Facility.

**SYLLABUS (GYNAECOLOGY)**

The course outline is as follows:

1. Introduction.

2. Anatomy of female

i. Genital organs

ii. Development of female genital organs

3. Puberty and adolescence.

4. Ovulation and its clinical importance.

5. Normal menstruation.

6. Menstrual abnormalities.

7. Gynaecological history taking and examination

8. Amenorrhoea

9. Infertility.

10. Contraception.

11. Ectopic pregnancy.

12. Bleeding in early pregnancy

 - Miscarriage

 - Ectopic

 - Molar Pregnancy

13. Trophoblastic tumours.

14. Vulval lesion.

15. Tumours of cervix.

16. Tumours of uterus.

17. Tumours of ovaries.

18. Menopause, Hormone replacement therapy.

19. Genital prolapse.

20. Pelvic floor injuries.

21. Urogynaecology.

22. Problems of marriage and sex.

23. Vaginal discharges.

24. Infections of female genital tract

 i. Infections of upper genital tract

 ii. Infections of lower genital tract

25. Endometriosis

**Practical:**

Log Book of 20 patients of Gynaecology.

**RECOMMENDED BOOKS:**

1. Gynaecology by Ten Teachers, by Stanley G. Clayton and Ash Monga, 20th Edition
2. Hacker & Moore’s Essentials of Obstetrics and Gynecology by Neville F. Hacker, Joseph C. Gambone, Calvin J, Hobel, 6th edition. 2015.
3. Notes on Obstetrics & Gynecology by Stirrat, Mills, Draycott. 5th Ed. 2003.
4. Text book of Gynecology by Rashid Latif, 7th Edition, 2012.
5. Fundamentals of Gynecology by Arshad Chohan, 2022, international edition.
6. Online Journals and Reading Materials through HEC Digital Library Facility.

**3rd Year Teaching planner**

Clinical Ward’s Rotation = 27 hours

**4th year shared lectures topics**

* Reproductive Health
* Sexually transmitted diseases
* Antenatal care
* Contraception

Duration of each lecture = 45 min (0.75 hour)

Total duration of lectures = 27 Hours (0.75 hr \*36 weeks)

Clinical Ward rotation = 45 hours (4 days /week)

Total hours in 4th year = 27+45= 72 hours

| **Sr. No.** | **Number of lectures** | **Chapter** | **Topics** |
| --- | --- | --- | --- |
|  | Lecture 14th year | Introduction to Obstetrics |  DefinitionsGravidity, parityObstetric examinationSymptoms of pregnancy |
|  | Lecture 2,34th year | Physiological changes in pregnancy | Effects of pregnancy on the cardiovascular, respiratory, genito-urinary systems |
|  | Lecture 44th year | Antenatal care | Frequency of antenatal visitsCommon antenatal problems |
|  | Lecture 54th year | Normal fetal development and growth | Fetal growth in different trimesters, fetal circulation, amniotic fluid production |
|  | Lecture 64th year | Assessment of fetal wellbeing | IntroductionCTGUltrasoundBiophysical profile |
|  | Lecture 74th year  | Abnormalities of amniotic fluid | OligohydramniosPolyhydramniosManagement |
|  | Lecture 84th year | Care of newborn  | APGAR scoreExamination of newborn babyResuscitation of newborn babyCommon neonatal problemsManagement |
|  | Lecture 94th year  | Multiple pregnancy | TypesComplicationsManagement |
|  | Lecture 104th year | Introduction |  Anatomy of femalei. Genital organsii. Development of female genital organs |
|  | Lecture 114th year |  Puberty and adolescenceOvulation and its clinical importance | IntroductionPuberty and secondary sexual development |
|  | Lecture 124th year | Normal menstruation | Physiology of menstruation |
|  | Lecture 134th year  |  Infertility | IntroductionNatural conceptionCauses of infertilityHistory and examination |
|  | Lecture 14,154th year | Contraception | IntroductionMethods of contraception |
|  | Lecture 16,174th year  | Infections of female genital tract | Infections of upper genital tractii. Infections of lower genital tract |
|  | Lecture 18,19,204th year | Labor | Mechanism of normal laborStages of laborManagement of labor |
|  | Lecture 214th year | Abnormal labor | Prolonged laborObstructed labor |
|  | Lecture 224th year | Fetal malpresentations/Malpositions | Brow presentationFace presentationOccipitoposterior |
|  | Lecture 234th year | Breech | Types, labor management, ECV |
|  | Lecture 244th year | Operative delivery | Cesarean sectionIndications/procedure/complications |
|  | Lecture 254th year | Instrumental delivery | Forceps deliveryVentouse deliveryComplications |
|  | Lecture 264th year | Induction of labour | IndicationsMethods |

**5th Teaching planner**

Duration of each lecture = 45 min (0.75 hour)

Total duration of lectures = 54 Hours (1.5 hr \* 36 weeks)

Clinical Ward morning = 120 hours (5 days /week for 6 weeks)

Clinical Ward Maternity Duty of 7 days duration = 4 hr X 7 days = 28 hours

Total hours in 5th year = 54+120+28 = 202 hours

| **Sr.No** | **Number of lecture** | **Chapter** | **Topics** |
| --- | --- | --- | --- |
|  | Lecture 1 5th year | Postpartum hemorrhage | Resuscitation and specific management |
|  | Lecture 2,35th year | Anemia in pregnancy | IntroductionTypes of anaemiaIron deficiency anaemiaThalassemiaManagement |
|  | Lecture 4,55th year | Diabetes in pregnancy | IntroductionTypesDiagnosisComplicationsManagement |
|  | Lecture 6,75th year | Hypertensive disorders in pregnancy | IntroductionTypesEtiologyManagement Eclampsia |
|  | Lecture 85th year | Cardiac diseases in pregnancy | Common cardiac conditionsManagement |
|  | Lecture 9,105th year | Antepartum haemorrhage  | IntroductionEtiology(Placenta previa, placental abruptionManagement |
|  | Lecture 115th year | Assessment |  |
|  | Lecture 125th year | Obstetric emergencies | Cord prolapse/uterine inversion, shoulder dystocia,maternal collapse  |
|  | Lecture 135th year | IUGR  | CausesManagement |
|  | Lecture 145th year | Preterm labor | DiagnosisTocolysisManagement |
|  | Lecture 155th year | Post term labor | IntroductionComplicationsInduction of labor |
|  | Lecture 165th year | Rh-incompatibility | PathophysiologyManagement |
|  | Lecture 175th year | Puerperium | Changes in puerperiumImportance and management of lactation, Common infections in puerperium,sepsis |
|  | Lecture 18,195th year | AmenorrhoeaPrimarySecondary | Definitions and typesCausesInvestigationsTreatment |
|  | Lecture 20,215th year | Disorders of menstruation | Definitionsand their management |
|  | Lecture 225th year | Assessment |  |
|  | Lecture 23(5th year) |  Infertility | IntroductionInvestigationsManagement |
|  | Lecture 245th year | Ectopic pregnancy | IntroductionAetiologyManagement |
|  | Lecture 255th year | Miscarriage  | IntroductionTypes CausesManagement |
|  | Lecture 265th year | Gestational trophoblastic neoplasia | IntroductionTypes( benign and malignant variants)Management |
|  | Lecture 27,285th year | Tumours of cervix | Premalignant disease of the cervixMalignant disease of the cervixStagingManagementCervical screening |
|  | Lecture 29,305th year | Tumours of uterus | Classification of endometrial cancersStagingmanagement |
|  | Lecture 31,325th year | Tumours of ovaries | ClassificationFIGO StagingManagementAdjuvant treatment |
|  | Lecture 335th year | Vulval lesions | Benign and malignant lesionsManagement |
|  | Lecture 345th year | Menopause, Hormone replacement therapy | DefinitionsPhysiological menopauseNon-physiological menopauseEffects and their management |
|  | Lecture 355th year | Pelvic organ prolapse | IntroductionSupports of uterusDegrees of prolapseTreatment |
|  | Lecture 365th year | Urinary incontinence | Types and management |
|  | Lecture 37,385th year | Endometriosis | IntroductionManagement |
|  | Lecture 395th year | Fibroid uterus | Pathology/Management |
|  | Lecture 405th Year  | Assessment |  |

Feedback is taken from the Students about program evaluation

Total Number of Hours

3rd year = 27 hours

4th year = 72 hours

Final Year = 202 hours

Total = 27+72+202 = 301 hours

**INTERNAL ASSESSMENT Marks: 30**

It includes Class tests, Ward test, Send-up examination result and attendance.

**ASSESSMENT METHODOLOGY**

***Formative***

**Theory,** single best multiple choice question test at the end of each topic finished

**Clinical ward test,** comprising of 25 marks and percentage is shown on card.

**Summative UHS examination (to be held at the end of 5th year MBBS)**

**Theory Paper I:** Obstetrics

**Theory Paper II:** Gynaecology **Summative examination details**

Paper -1, Obstetrics = 70 marks, 7 seq= 35 marks, 35 Single best answer multiple choice questions= 35

Total = 70 marks

Paper- 2, Gynae = 65 marks, 10 seq= 30 marks, 35 Single best answer multiple choice questions= 35 Total = 65 marks

Internal assessment=15 marks

**Total of theory= 150 marks**

**Clinical and practical exams**

OSCE= 75 marks, 15 stations, 8 obstetrics (5 static and 3 interactive) and 7 Gynaecology (5 static and 2 interactive)

Long case obstetrics= 30 marks

Long case Gynaecology= 30 marks

Internal assessment= 15 marks

**Total of viva = 150 marks**

**Total marks of theory and viva =150+150 = 300 marks**