



# **College of Physicians and Surgeons of Mumbai**

## **Syllabus for CPS-PG-Course**

### **FCPS (MID-GY) : FELLOWSHIP IN MIDWIFERY & GYNAECOLOGY**

**College of Physicians and Surgeons of Mumbai**

CPS House, Dr. E. Borges Marg, Parel, Mumbai – 400012.

## **FCPS (MID-GY) : FELLOWSHIP IN MIDWIFERY & GYNAECOLOGY (MID-GY)**

### **SYLLABUS**

#### **OBSTETRICS:**

1. Basic sciences:
  - A. Normal & abnormal development. Applied Anatomy in females of genito-urinary system, abdomen, pelvis, pelvic floor, anterior abdominal wall, breast, inguinal canal, rectum & anal canal.
  - B. Anatomy of fetus, Foetal growth and development.
  - C. Fundamentals of reproduction:
  - D. Molecular biology
2. Normal pregnancy, Labour & Puerperium. Breast feeding - baby friendly initiative
3. Early recognition and prompt management of pregnancy complications.
4. Management of pregnancies complicated by medical, surgical or gynaecological diseases in consultation with the concerned specialities by team approach. Recent advances in medical and surgical management.
5. Infections in pregnancy: Malaria, Toxoplasmosis, viral infections (Rubella, CMV, Hepatitis B, Herpes) syphilis and other sexually transmitted infections including HIV, Leptospirosis. Parents to child transmission of HIV infection. (PPTCT)
6. Evaluation of the fetal and maternal health in complicated pregnancy by making use of available diagnostic modalities and plan for safe delivery of the fetus while safeguarding the maternal health. Identification of fetus at risk and management. High risk pregnancy, recurrent pregnancy wastages. Imaging techniques, CTG
7. Prenatal diagnosis of fetal abnormalities and appropriate care. Fetal therapy. PCNDT Act and its implications.
8. Petrographic monitoring of labor progress, early recognition of dysfunctional labour and appropriate interventions during labour including active management of labour.
9. Maternal and foetal monitoring in normal and abnormal labor.
10. Obstetrical analgesia and anesthesia.
11. Cord presentation and cord prolapse and its management.
12. Foetal Monitoring by Ultrasonography, Doppler, Cardiotocography (NST)
13. Induction and augmentation of labour.
14. Management of abnormal labour: Normal and abnormal Puerperium, Puerperal sepsis Thrombophlebitis, Puerperal venous sinus thrombosis, Psychosis, Postpartum shock.
15. National Health Programmes to improve the maternal and child health, social obstetrics and vital statistics. (Maternal and Perinatal mortality) like NRHM, WHO Programmes.
16. Drugs used in obstetric practice including prostaglandins. FDA Classification and all recent Drugs used in Obstetrics & Gynaecology.
17. Coagulation disorders in obstetrics, Blood and component therapy.
18. Operative obstetrics - decision making, technique, recognition and management of complications - C.S.

instrumental delivery, obstetrics hysterectomy, role of destructive surgery. Manipulations-version, MRP etc.

Forceps, Vacuum, Internal iliac artery ligation, Rupture uterus, genital trauma, perineal tear.

19. Use of blood and blood products.
20. Intensive care in obstetrics for critically ill patient. Fluid and electrolyte balance, volume status maintenance, protecting vital organ function.
21. Provision of safe abortion services
22. Post partum contraception.
23. Breast feeding.

#### **NEW BORN**

1. Care of newborn, normal and high risk new born. Care of preterm, S.G.A. neonates, IUGR, infants of diabetic mother.
2. Asphyxia & Neonatal resuscitation (Respiratory distress syndrome and Meconium aspiration syndrome)
3. Neonatal sepsis - prevention, early detection & management.
4. Neonatal hyperbilirubinemia, investigation and management.
5. Birth trauma - prevention, early detection & management.
6. Detection of congenital malformations in new born and make timely referrals for surgical corrections.
7. Management of the common problems in neonatal period.
8. Foetal Therapy.
9. Immunization of Newborn & Infant

#### **MEDICAL GENETICS:**

1. Basic Medical genetics.
2. Cytogenetics.
3. Pattern of inheritance.
4. Chromosomal abnormalities
5. General principles of teratology.
6. Screening counseling & prevention of developmental abnormalities.
7. Birth defects – genetic, teratology and counseling foetal therapy. Social Obstetrics:
  1. MCH Programmes.
  2. RCH Programmes.
  3. Vital statistics.
  4. NRHM Programmes.

#### **Environment and health**

1. Concept of safe disposal of human body fluids, materials.
2. Universal precautions for the prevention of HIV.
3. Effect of environment on pregnancy outcome.

#### **GYNAECOLOGY:**

1. Basic sciences: Development of genital tract and associated malformations. Basics of breast diseases related to

Obs & Gyn, applied anatomy of female genital tract, abdominal wall and urinary tract. Physiology of menstruation and ovulation Physiology of spermatogenesis.

2. Endocrinology - hypothalamus pituitary, thyroid and adrenal glands Neurotransmitters in reproduction.
3. Common menstrual disorders and their management
4. Diagnosis and surgical management of clinical conditions related to congenital malformations of genital tract. Reconstructive surgery in gynecology
5. Chromosomal abnormalities and intersex. Ambiguous sex at birth.
6. Reproductive Endocrinology: Evaluation of primary and secondary amenorrhea, management of hyperprolactinemia, Hirsutism, chronic anovulation and PCOS, Thyroid dysfunction, adrenal dysfunction.
7. Endometriosis and adenomyosis - medical and surgical management.
8. Infertility evaluation and management.( male & female) Use of ovulation induction methods and Tubal microsurgery, Assisted reproduction techniques ( IVF,ICSI,TESA, Other Recent Advances)management of immunological factors in infertility. Obesity & infertility, Adoption law, medico-legal and ethical issues.
9. Reproductive Tract Infections, Sexually Transmitted Infections, HIV/AIDS : Prevention, Diagnosis and management. Genital Tuberculosis.
10. Screening for genital malignancies - cytology, colposcopy and biochemistry. Management of premalignant lesions
11. Benign and malignant tumors of genital tract – Early diagnosis andmanagement.
12. Principles and practice of oncology in gynecology - chemotherapy, radiotherapy, palliative treatment.
13. Supports of pelvic organs , genital prolapse, surgical management of genital prolapse. Endometrial hyperplasia.
14. Common urological problems in gynaecology - SUI, voiding difficulties, VVF, urodynamics, surgical repair of genital fistulae, ureteric and bladder injuries.
15. Management of menopause, prevention of complications, HRT, cancer screening - genital, breast.
16. Recent advances.
17. Newer diagnostic aids - USG, interventional Sonography, other imaging techniques, Endoscopy, methods of prenatal diagnosis.
18. Hysteroscopy, Laparoscopy - diagnostic, surgical procedures, including laparoscopic tubal occlusion , endometrial ablative techniques, Laparoscopic Hysterectomy,Laparoscopic Myomectomy ,Hysteroscopic resection of fibroid,polyp,adhesions,colposcopy.
19. Medicolegal aspects, ethics, communications and counselling. (Sexual/Assaults), evaluation of a rape victim.
20. Operative gynaecology - Selection of case, technique and management of complications of minor and major gynaecology procedures.
  - a. Abdominal and vaginal hysterectomy, Surgical treatment for fibromyomas & endometriosis
  - b. Surgical procedures for genital prolapsed
  - c. Surgical management of benign and malignant genitalneoplasms.
  - d. Repair of genital fistulae, SUI
  - e. Operative endoscopy – Laparoscopic, Hysteroscopic
21. Recent advances in gynaecology - diagnostic and therapeutic
22. Special groups - Pediatric and adolescent gynaecology, geriatric gynaecology, menopause Management

(HRT)& prevention of its complications.

23. Evidence based management
24. Medical Ethics.
25. Medico-legal Aspects.

**FAMILY PLANNING:**

1. Demography and population Dynamics.
2. Contraception - Temporary methods. Permanent methods
  - (vasectomy and female sterilization) Legal issues.
  - MTP Act and procedures of MTP in first & second Trimester.
  - Recent Amendments, Legal/ethical issues in MTP/PCPNDT.
  - Emergency contraception.
3. Recent advances, New development, Future research.
4. PCPNDT ACT.
5. Maternal mortality.
6. Maternal health policies.
7. KAP in family planning.
8. Work in contraceptive technology.

**TEACHING PROGRAM**

**GENERAL PRINCIPLES**

Acquisition of practical competencies being the keystone of postgraduate medical education, postgraduate training is skill oriented. Learning in postgraduate program is essentially self-directed and primarily emanating from clinical and academic work. The formal sessions are merely meant to supplement this core effort.

**TEACHING SESSIONS**

- Bedside teaching rounds
  - Journal club
  - Seminar
  - PG case discussion
  - Specimen Study
  - Ultrasonography
  - NST
- ❖ Central session (held in hospital auditorium regarding various topics like CPC, guest lectures, student seminars, grand round, sessions on basic sciences, biostatistics, research methodology, teaching methodology, health economics, medical ethics and legal issues).

**FCPS-MIDWIFERY AND GYNAECOLOGY****EXAMINATION PATTERN****Theory Examination:**

<b>PAPER I</b>	<b>PAPER II</b>	<b>PAPER III</b>	<b>PAPER IV</b>
All Applied Basic Sciences In Relation to Obstetrics and Gynaecology	Obstetrics Including Operative Obstetrics, Diseases of New born & Recent Advances in Perinatology and Neonatology	Gynaecology Including Operative Gynaecology and Recent Advances	Recent Advances in Gynaecology and Family Planning Methods.
<b>Section I</b>	<b>Section I</b>	<b>Section I</b>	<b>Section I</b>
Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks <b>Total 50 Marks</b>	Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks <b>Total 50 Marks</b>	Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks <b>Total 50 Marks</b>	Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks <b>Total 50 Marks</b>
<b>Section II</b>	<b>Section II</b>	<b>Section II</b>	<b>Section II</b>
Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks <b>Total 50 Marks</b>	Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks <b>Total 50 Marks</b>	Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks <b>Total 50 Marks</b>	Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks <b>Total 50 Marks</b>
Section I + II = 100 Marks	Section I + II = 100 Marks	Section I + II = 100 Marks	Section I + II = 100 Marks
<b>Total Theory = 400 Marks, Passing = 200 (i.e. 50%) Marks in aggregate</b>			

<b>Practical Examination:</b>		<b>Marks</b>
<b>Paper - V</b>	Gynaecology Long Case	<b>60</b>
<b>Paper - VI</b>	Gynaecology Short Case	<b>40</b>
<b>Paper - VII</b>	Obstetrics Long Case ( Midwifery)	<b>60</b>
<b>Paper - VIII</b>	Obstetrics Short Case ( Midwifery)	<b>40</b>
<b>Paper - IX</b>	Obstetrics Instruments, Specimens, Drugs, USG/CT/MRI Plates, NST.	<b>50</b>
<b>Paper - X</b>	Gynaecology Instruments, Specimens, Drugs, USG/CT/MRI/ HSG Plates. Family Planning Methods & Devices.	<b>50</b>
<b>Total Marks</b>	<b>Passing = 150 (i.e. 50%) Marks in aggregate</b>	<b>300</b>

## THESIS

Every student registered as a post graduate shall carry out work on an assigned research project under the guidance of a recognized post graduate teacher, the result of which shall be written up and submitted in the form of a thesis. Work for writing the Thesis is aimed at contributing to the development of a spirit of enquiry, besides exposing the student to the techniques of research, critical analysis, acquaintance with the latest advances in medical science and the manner of identifying and consulting available literature. Thesis shall be submitted at least six months before the theory and clinical / practical examination. The thesis shall be a bound volume of a minimum of 50 pages and not exceeding 75 pages of typed matter (Double line spacing and on one side only) excluding certification, acknowledgements, annexure and bibliography.

### Thesis should consist of

- a) Introduction
- b) Review of literature
- c) Aims and objectives
- d) Material and methods
- e) Result
- f) Discussion
- g) Summary and conclusion Tables
- h) Annexure
- i) Bibliography

### Basic sciences:

- a) Normal & abnormal development. Applied Anatomy in females of genito-urinary system, abdomen, pelvis, pelvic floor, anterior abdominal wall, breast, inguinal canal, rectum & anal canal.
- b) Anatomy of fetus, Foetal growth and development.
- c) Fundamentals of reproduction:
- d) Molecular biology

Normal pregnancy, Labour & Puerperium. Breast feeding - baby friendly initiative

Early recognition and prompt management of pregnancy complications.

Management of pregnancies complicated by medical, surgical or gynaecological diseases in consultation with the concerned specialities by team approach. Recent advances in medical and surgical management.

Infections in pregnancy: Malaria, Toxoplasmosis, viral infections (Rubella, CMV, Hepatitis B, Herpes) syphilis and other sexually transmitted infections including HIV, Leptospirosis. Parents to child transmission of HIV infection. (PPTCT)

Evaluation of the fetal and maternal health in complicated pregnancy by making use of available diagnostic modalities and plan for safe delivery of the fetus while safeguarding the maternal health. Identification of fetus at risk and management. High risk pregnancy, recurrent pregnancy wastages. Imaging techniques, CTG Prenatal diagnosis of fetal abnormalities and appropriate care. Fetal therapy. PCNDT Act and its implications.

Partographic monitoring of labour progress, early recognition of dysfunctional labour and appropriate interventions during labour including active management of labour.

Maternal and foetal monitoring in normal and abnormal labour