

Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE
Deemed to be University

Maduravoyal, Chennai – 600 095, Tamilnadu, India
(An ISO 2001:2018 Certified Institution)

University with Graded Autonomy Status



SYLLABUS & CURRICULUM
for
M.S. OBSTETRICS & GYNAECOLOGY

2020 onwards

Sponsored by

Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE TRUST

OBSTETRICS & GYNAECOLOGY

GOAL

The goal of the MS course in Obstetrics and Gynaecology is to produce a competent Obstetrician and Gynaecologist who can:

- Practice efficiently and effectively, backed by scientific knowledge and skill base.
- Exercise empathy and a caring attitude and maintain high ethical standards.
- Development of judgment in selecting and performing appropriate surgical care of common gynaecologic problems
- Refine surgical skills in performance of advanced surgical procedures.

OBJECTIVES

With the knowledge and skills developed at the completion of the course, the candidate shall be able to;

- ❖ Offer quality care to the community in the diagnosis and management of antenatal, intra-natal and Post-natal period of normal and abnormal pregnancy and labor.
- ❖ Provide effective and adequate care to pregnant woman with high risk pregnancy.
- ❖ Provide effective and adequate care to a normal and high risk neonate.
- ❖ To perform ultrasound and Doppler in normal and abnormal pregnancy.
- ❖ All obstetrical and gynaecological emergencies should be managed effectively.
- ❖ 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.

- ❖ Effectively communicate with patients or relatives so as to educate them sufficiently and give them full benefit of informed consent to treatment and ensure compliance.

SUBJECT SPECIFIC COMPETENCIES

1. Cognitive Domain

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

1ST YEAR

1. Recognise the health needs of women and adolescents and carries out professional obligations in keeping with principles of National Health Policy and professional ethics.
2. Has acquired the competencies pertaining to Obstetrics and Gynaecology that are required to be practiced in the community and at all levels of health system.
3. Interpretation of various laboratory investigations and other diagnostic modalities in Obstetrics and Gynaecology
4. On elementary knowledge of female breast and its diseases.
5. Asepsis, sterilization and disposal of medical waste.
6. On vital statistics in Obstetrics and Gynaecology.

2ND YEAR

1. On genetics as applicable to obstetrics
2. On care of postmenopausal women and geriatric gynaecology
3. On benign and malignant gynaecological disorders.

4. Reproductive and child health, family welfare& reproductive tract infections.
5. STD and AIDS & Government of India perspective on women's health related issues.

3rd YEAR

1. Maintain medical records properly and know the Medicolegal aspects in Obstetrics and gynaecology.
2. 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.
3. On essential of pediatric and adolescent gynaecology.
4. Has acquired the competencies pertaining to Obstetrics and Gynecology that are required to be practiced in the community and at the levels of health system.
5. On gynaecological Endocrinology and infertility.
6. Is aware of the contemporary advances and development in medical sciences as related to Obstetrics and gynaecology.
7. Knowledge of Epidemiology of reproductive tract infections like Chlamydia , trichomonas and HIV infection in Indian women of reproductive age group. The cause, effect and management of these infections.
8. HIV infection in pregnancy ,its effects and management.

Ethical and Legal Issues

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.

Risk Management

The post graduate student should demonstrate a working knowledge of the principles of risk management and their relationship to clinical governance and complaints procedures.

Confidentiality

The post graduate student should:

- ❖ be aware of the relevant strategies to ensure confidentiality and when it might be broken.
- ❖ 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
- ❖ be abreast with all recent advances in Obstetrics and Gynaecology and practice evidence based medicine

Use of information technology, audits and standards

The post graduate student should:

- ❖ acquire a full understating of all common usage of computing systems including the principles of data collection, storage, retrieval, analysis and presentation.
- ❖ 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.
- ❖ understand National Health Programmes related to Obstetrics and Gynaecology and should be aware of all the Acts and Laws related to specialty.

B. Affective Domain

1. Develop communication skills to word reports and professional opinion as well as to interact with patients, relatives peers and paramedical staff, and for effective teaching.
2. Always adopt ethical principles and maintain proper etiquette in dealings with patients, relatives and other health personnel and to respect the rights of the patient including the right to information and second opinion.
3. Should be able to function as a part of a team, develop an attitude of cooperation with colleagues, and interact with the patient and the clinician or other colleagues to provide the best possible diagnosis or opinion.
4. Develop communication skills to word reports and professional opinion as well as to interact with patients, relatives, peers and paramedical staff and for effective teaching.

C. Psychomotor domain

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

1st year

PROCEDURES OBSERVED – Obstetrical Operations.

PROCEDURES PERFORMED

- 1) Episiotomy and its repair
- 2) Conduct normal deliveries.
- 3) Venesection
- 4) Endometrial/ cervical biopsy
- 5) Dilatation and curettage

DIAGNOSTIC PROCEDURES

- 1) Interpretation of xray-twins, common fetal malformations/ malpresentations, abnormal pelvis.
- 2) Hysterosalpingography
- 3) Normal pregnancies
- 4) Vaginal pap smear

2nd year

Procedures observed

- 1) Internal podalic version
- 2) Caesarean hysterectomy
- 3) Internal iliac artery ligation.

Procedures performed

- 1) Application of forceps and ventouse
- 2) Manual removal of placenta
- 3) Culdocentesis
- 4) Colpotomy
- 5) Opening and closing of abdomen(10 must be done)

Diagnostic procedures

- 1) Sonographic pictures of various stages of pregnancy
- 2) Abnormal pregnancies
- 3) Fetal biophysical profile
- 4) Common gynaecological pathologies.
- 5) Fetal surveillance
- 6) Colposcopy

3rd year

Procedures observed

- 1) Tubal microsurgery
- 2) Radical operations for gynaec malignancies
- 3) Repair of genital fistulae
- 4) Operations for incontinence
- 5) Myomectomy, laproscopic and hysteroscopy.

Procedures performed

- 1) Carry out caesarian section delivery(10 must be done)
- 2) Management of genital tract obstetrical injuries
- 3) Postpartum sterilization/minilap tubal ligation (20 must be done)
- 4) Medical termination of pregnancy.
- 5) Operations for POP
- 6) Ovarian cyst operation
- 7) Operation for ectopic pregnancy
- 8) Vaginal and abdominal hysterectomy

Diagnostic procedures

- ❖ Amniocentesis
- ❖ Endoscopy
- ❖ Laproscopy and hysteroscopy.

SYLLABUS

Course contents

Paper 1

1. Basic sciences

- ❖ Anatomy of the female reproductive organs- external genitalia, internal genitalia, muscles and fascia in relation to pelvic organs, pelvic floor, perineum, pelvic fascia, pelvic cellular tissue, female urethra, urinary bladder, pelvic ureter and pelvis.

- ❖ Physiology and working of genital organs
- ❖ Normal and abnormal microbiology of genital tract
- ❖ Humoral and cellular immunology in OBG
- ❖ Normal and abnormal development, structure and function of urogenital system and breast in females
- ❖ Applied anatomy of genitourinary system, abdomen, pelvis, pelvic floor, anterior abdominal wall, inguinal ligament, inguinal canal, vulva, rectum and anal canal

2. Fundamentals of reproduction

- ❖ Gametogenesis, Oogenesis and spermatogenesis
- ❖ Ovulation
- ❖ Fertilization- morula blastocyst
- ❖ Implantation- trophoblast, decidua, chorion and chorionic villi, development of inner cell mass, events following fertilization

3. The Fetus

- ❖ Fetal anatomy, fetal growth and development
- ❖ Fetal physiology, fetal circulation, changes of the fetal circulation at birth
- ❖ Fetal skull

4. The Placenta and Fetal membranes

- ❖ Development, structure and function of placenta, umbilical cord and amniotic fluid.
- ❖ Placental circulation and placental aging
- ❖ Fetal membranes- amniotic cavity, amnion and amniotic fluid
- ❖ Pathology of placenta, umbilical cord, amniotic fluid and fetus

5. Physiological changes during pregnancy

- ❖ Genital organs, breast, cutaneous changes, weight gain
- ❖ Body water metabolism- renal changes
- ❖ Hematological changes

- ❖ Cardiovascular changes
- ❖ Metabolic changes
- ❖ Systemic changes- hepatic changes
- ❖ Biophysical and biochemical changes in uterus and cervix during pregnancy and labor

6. Endocrinology in relation to reproduction

- ❖ Changes of endocrine glands during pregnancy
- ❖ Maintenance of lactation
- ❖ Placental endocrinology- protein hormones, steroid hormones, diagnostic value of placental hormones
- ❖ Maturation of graffian follicle and ovulation
- ❖ Maintenance of corpus luteum after fertilization

7. Special topics

- ❖ Pharmacology of identified drugs during pregnancy, labor, post partum period, in reference to their absorption, distribution, (hepatic) metabolism, transfer of drugs across placenta, effect of drugs used on labour, on fetus, their excretion through breast milk
- ❖ Psychosexual issues and female sexuality

8. Immunology of pregnancy

9. Lactation

10. Medical Genetics

- ❖ Basic medical genetics including cytogenetics, pattern of inheritance
- ❖ chromosomal abnormalities- types, incidence, diagnosis, management, recurrence risk
- ❖ General principles of teratology
- ❖ Screening, counselling and prevention of developmental abnormalities

- ❖ Birth defects- genetics and teratology counseling.
 - ❖ Prenatal genetic screening
 - ❖ Prenatal diagnosis
 - ❖ Non invasive method of prenatal testing
11. **Neuro-endocrinology in relation to reproduction**
 12. **Mechanism of action, metabolism and excretion of drugs identified for gynecological disorders**
 13. **Hormones in gynecological practice**
 - ❖ Nomenclature
 - ❖ Hypothalamic hormones
 - ❖ Gonadal hormones, adrenocortical hormones, thyroid hormones
 14. **Markers in obstetrics and gynaecology – For non-neoplastic and neoplastic disorders**

PAPER 2- CLINICAL OBSTETRICS

A. Antenatal Care

1. Diagnosis of pregnancy

- ❖ First trimester
- ❖ Second trimester
- ❖ Third trimester
- ❖ Differential diagnosis of pregnancy, summary of diagnosis of pregnancy
- ❖ Chronological appearance of specific symptoms and signs of pregnancy
- ❖ Signs of previous child birth
- ❖ Estimation of gestational age and prediction of expected date of delivery
- ❖ Estimation of fetal weight

2. The fetus in utero

3. Antenatal care

- ❖ Prenatal care of normal pregnancy including examination, nutrition, immunization and follow up.
- ❖ Procedure at the first visit and subsequent visits
- ❖ Antenatal advice and minor ailments in pregnancy

4. Antenatal assessment of fetal wellbeing:

- ❖ Clinical evaluation of fetal well being
- ❖ Special investigations
- ❖ Early pregnancy
- ❖ Antepartum fetal surveillance
- ❖ Other investigations in late pregnancy

5. Medical and surgical disorders complicating pregnancy

- ❖ Hematological disorders in pregnancy- anemia, thalassemia syndromes, sickle cell disease, hemoglobinopathies, platelets disorders
- ❖ Cardiovascular and thromboembolic diseases in pregnancy
- ❖ Chronic hypertension
- ❖ Pulmonary disorders- Asthma in pregnancy
- ❖ Endocrine disorders- Thyroid dysfunction and pregnancy; Diabetes mellitus in pregnancy, etc.
- ❖ Connective tissue disorders
- ❖ Gastrointestinal disorders- hepatic, biliary and pancreatic , acute abdomen
- ❖ Renal and urinary tract diseases
- ❖ Neurological disorders- Epilepsy in pregnancy
- ❖ Psychiatric and dermatological disorders
- ❖ Obesity
- ❖ Critical care and trauma
- ❖ Infectious diseases-bacterial, viral, fungal and protozoal; TORCH infections

- ❖ STI

6. Early pregnancy complications:

- ❖ Abortion
- ❖ Ectopic pregnancy
- ❖ Gestational trophoblastic diseases
- ❖ Hyperemesis Gravidarum

7. Obstetric complications of pregnancy

- ❖ hypertensive disorders
- ❖ obstetric hemorrhage
- ❖ preterm labour, PROM, PPROM
- ❖ post term pregnancy
- ❖ fetal growth disorders
- ❖ multifetal pregnancy
- ❖ oligohydramnios, Polyhydramnios
- ❖ Recurrent pregnancy loss

8. The newborn

- ❖ Diseases and injury of term newborns- Rh isoimmunisation
- ❖ Preterm newborn
- ❖ Stillbirth
- ❖ IUFD

9. Imaging in obstetrics

- ❖ USG
- ❖ 3D USG
- ❖ First trimester imaging- with Chorionic villous biopsy, NT scan
- ❖ Second trimester – amniocentesis, Doppler study, TIFA
- ❖ Third trimester scan- BPP, interval growth scan, term scan, Doppler scan
- ❖ MRI, CT scan and radiology in obstetrics

**10. National health MCH programs, social obstetrics and vital statistics-
MTP, PNDT Act, etc**

11. Recent advances in obstetrics

B. INTRA PARTUM CARE

1. Labor

- ❖ Physiology of Labor
- ❖ Normal labor and management
- ❖ Partographic monitoring of Labor Progress.
- ❖ Intra partum Assessment
- ❖ Obstetrical Analgesia and Anesthesia
- ❖ Induction and Augmentation of Labor

2. Abnormal Labor

- ❖ Malposition, Malpresentation and Cord Prolapse.
- ❖ Prolonged labor, Obstructed Labor, Dystocia
- ❖ Complicated Delivery –Breech, face, brow , labor following
Caesarean section ,instrumental delivery- vacuum ,forceps;
obstetric hysterectomy , destructive operations, external cephalic
version, internal podalic version.
- ❖ Abnormal uterine action

3. Complications of third stage of Labor

- ❖ PPH
- ❖ Retained Placenta- MRP
- ❖ Acute inversion of uterus
- ❖ Rupture of Uterus

C. Post Partum

1. Amniotic fluid embolism

2. Injuries to birth canal

- ❖ Episiotomy complications
- ❖ Perineal tears , cervical /vaginal tears.

- ❖ Visceral injuries
- ❖ Uterine rupture
- ❖ Pelvic hematoma

3. Abnormalities of Puerperium

- ❖ Pyrexia
- ❖ Sepsis
- ❖ Subinvolution
- ❖ Urinary complications
- ❖ Breast Complications
- ❖ Venous thrombosis and pulmonary Embolism
- ❖ Obstetric palsies.
- ❖ Emergencies- shock and management of critically ill woman.
- ❖ Psychiatric disorders.
- ❖ Psychological response to perinatal death and management.
- ❖ Post partum Contraception
- ❖ Breast Feeding and Counseling , Problem in breast feeding and management.

D. New Born

1. Care of newborn

- ❖ Term, low birth weight and high risk newborns.

- 2. Perinatal asphyxia**
- 3. Respiratory distress in newborns.**
- 4. Meconium aspiration syndrome.**
- 5. Jaundice in newborn, hyperbilirubinemia, kernicterus.**
- 6. Hematological diseases –ABO incompatibility, bleeding disorders, anemia.**
- 7. Birth injuries.**
- 8. Intra cranial hemorrhage, seizures.**
- 9. Ophthalmia neonatorum.**
- 10. NEC**

11. Congenital malformations and surgical emergencies.

12. Downs syndrome

13. Neonatal sepsis

14. Hydrops foetalis.

PAPER 3 : CLINICAL GYNECOLOGY AND FERTILITY REGULATION

1. Benign lesions of the uterus :

- ❖ Fibroid
- ❖ Polyp
- ❖ Endometriosis and adenomyosis
- ❖ Endometrial hyperplasia

2. Pelvic organ prolapse

3. Benign lesions of cervix:

Cervical erosion, cervicitis, cervical polyp, cervical ectopy, eversion, cervical tears, cysts

4. Benign lesions of vulva and vagina :

Vaginal cyst, vaginal infections, vulval ulcers, vulval epithelial disorders, benign tumors of vulva, vulvar pain syndrome

5. Benign ovarian pathologies :

Ovarian enlargement, benign ovarian neoplasms, borderline epithelial tumors, para-ovarian cyst

6. Malignant genital neoplasia :

- ❖ Vaginal neoplasia, premalignant vulval lesions, vulvar carcinomas
- ❖ CIN, cervical neoplasias
- ❖ Uterine neoplasias : Endometrial carcinomas, sarcomas, gestational trophoblastic neoplasia
- ❖ Malignant ovarian tumors
- ❖ Metastatic tumors
- ❖ Carcinoma fallopian tube

- ❖ Diagnostic modalities and staging
 - ❖ Principles of radiotherapy, chemotherapy, immunotherapy :
Choice, schedules, complications
7. Development of genital organs and gonads :
- ❖ Development of external and internal genital organs
 - ❖ Male and female embryonic structures
8. Congenital malformations of female genital organs
- ❖ Developmental anomalies of external and internal genitalia
 - ❖ Vaginal anomalies
 - ❖ Uterine anomalies
 - ❖ Diagnostic and surgical management – reconstructive surgeries
 - ❖ Intersex, ambiguous sex and chromosomal abnormalities
9. Endocrinal abnormalities
- ❖ Menstrual abnormalities, primary and secondary amenorrhoea
 - ❖ DUB
 - ❖ PCOD
 - ❖ Hyperprolactinemia
 - ❖ Hyperandrogenism
 - ❖ Thyroid, pituitary , adrenal disorders
 - ❖ Menopause and HRT
10. Evaluation of primary and secondary amenorrhoea
11. Reproductive tract infections
- ❖ STDs
 - ❖ HIV
 - ❖ Genital TB
 - ❖ Vulval infections, infections of bartholin gland, vaginal infections
 - ❖ Cervicitis, endometritis, pyometra, salpingitis, oophoritis, parametritis
 - ❖ Pelvic abscess
 - ❖ Acute and chronic PID

12. Urogynaecology

- ❖ UTI
- ❖ Urogenital fistulas
- ❖ Incontinence
- ❖ Other urological problems

13. Orthopedic problems in gynaecology

14. Infertility

- ❖ Definition, causes, investigations, treatment of underlying causes
- ❖ Assisted reproductive techniques
- ❖ Male factor
- ❖ Micro-manipulation, gestational carrier surrogacy, prognosis of infertility

15. Endoscopy in gynaecology and advanced operative procedures

- ❖ Diagnostic and simple therapeutic procedures including laparoscopy, hysteroscopy
- ❖ Abdominal and vaginal hysterectomy
- ❖ Procedures for genital prolapse, fibro-myoma, adnexal masses, cervical/vaginal/vulval pathologies
- ❖ Surgical management of urinary incontinence, fistulas etc

16. Recent advances in gynaecology

17. Paediatric and adolescent gynaecology

Endocrinology and common disorders of puberty

18. Statistics and reproductive and child health programs

- ❖ Perinatal morbidity/mortality
- ❖ Birth rate, fertility rate, maternal mortality
- ❖ Demography and population dynamics
- ❖ National health policies and programs – Organisation and operational aspects

19. Contraception

- ❖ Temporary methods and permanent methods
- ❖ Male and female contraceptives

20. MTP

- ❖ MTP Act
- ❖ Safe and adequate MTP services

21. Social obstetrics

22. Family welfare programs including reconstructive surgeries –
Government welfare programs

23. Perinatology

24. Mortality and Morbidity

PAPER 4

1) Recent advances in Obstetrics and Gynaecology
TEACHING LEARNING METHODS (including clinical study)

- 1) Seminars/ Symposia
- 2) Journal clubs
- 3) Group discussions
- 4) Clinical rounds/ combined case discussions
- 5) Case presentations/ Bedside teaching
- 6) Maternal care review meetings
- 7) Perinatal meetings
- 8) Clinico pathological meetings
- 9) Attending conferences, workshops, CME programs

YEAR WISE STRUCTURED TRAINING SCHEDULE

1st year

Theoretical knowledge, Basic sciences

- i) Examination and diagnosis of obstetrics and gynaecology cases with relevant Investigations and case recording.

- i. ii) Surgical skills - Assisting caesarean sections as second assistant initially and later on as first assistant with supervision. Assisting major gynaecological operations like vaginal and abdominal hysterectomies as second assistant. Minor operations- Assisting minor operations like MTP, Tubectomy, Laparoscopy, Cervical biopsy, D&C in the initial period and later on doing independently under supervision.

2nd year

Theoretical knowledge of allied subjects

- i. Clinical examination and diagnosis:- The student is encouraged to take diagnostic, investigational and therapeutic decisions.
- ii. Surgical skills: At the end of the second year, the student should be capable of operating without assistance but under supervision, like caesarean section and minor operations like MTP, Cervical biopsy, D&C, Tubectomies, Outlet forceps, Vacuum and emergencies during delivery.
- iii. The student must know how to manage the complications during and after delivery confidently.
- iv. Conference and workshops: Encouraged to attend and actively participate in CMEs, conferences by presenting papers at state and national level.
- v. Lectures, seminars, symposia, inter and intra departmental meetings (clinicopathological, radiodiagnosis, radiotherapy, anesthesia, neonatology)
- vi. Maternal morbidity, mortality meetings and journal clubs to be attended.

- vii. Records to be maintained by the department
- viii. Maintenance of log books: Log books shall be checked and assessed periodically.

3rd year

- i. Student should know basics, allied and recent advances.
- ii. Clinical diagnosis & examination- Should be able to make clinical diagnosis and be familiar with techniques of operation like caesarean section, abdominal and vaginal hysterectomies, reconstructive surgeries of fallopian tubes and surgeries on ovarian tumors. Techniques of assisted reproductive technologies.
- iii. Teaching activities- Final year student should take lead in conducting seminars, panel discussions, journal clubs and case discussions with first and second year students especially bedside clinics.
- iv. A postgraduate student of a postgraduate degree course in broad specialties/ super specialties 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 his/her postgraduate studies so as to make him/her eligible to appear at the postgraduate degree examination.
- v. Department should encourage e-learning activities.

The student must also be exposed to the assisted reproductive technologies like IVF, ET, ICSI and also to observe radical surgeries in gyno-oncology.

PRACTICAL AND CLINICAL TRAINING

- ❖ Emphasis should be self-learning, group discussions and case presentations.
- ❖ Student should be trained about proper history taking, clinical examination, relevant investigations, interpretation and related management by posting student in the OPD, speciality clinics, wards, operation theatres, labor room, family planning clinics and other departments.

STRUCTURED TRAINING PROGRAMME

POSTINGS	I YEAR	II YEAR	III YEAR
Labor room	3 months	3 months	3 months
ANC/PNC	4 months	3 months	4 months
GYN/POW	4 months	3 months	4 months
Radiology		15 days	
Radiotherapy		15 days	
IVF & Infertility		15 days	
Neonatology		15 days	
Anasthesia		15 days	
Gynaec-oncology		15 days	
Gynaec-urology	15 days		
Diabetology & Medicine	15 days		

- ❖ During their 2nd and 3rd year students are encouraged to undergo special training programme in advanced techniques/procedures/skills in institutions of higher repute where the requisite facilities are available without affecting the duties of the parent department.

1st term - working under supervision of senior residents and Teaching faculty.

2nd & 3rd term- Besides patient care in O.P.D., wards, Casualty and labor room, carrying out minor operations under Supervision and assisting in major operation.

4th, 5th & 6th term - independent duties in management of patient including Major operations under supervision of teaching faculty.

TEACHING AND LEARNING EXPERIENCE

- ❖ Postgraduates should work in the institution as a full time student. No candidate should be permitted to run his/her own clinic or nursing home while studying. Each year should be taken as a unit for the purpose of calculating attendance.
- ❖ **Lectures:** Lectures are to be kept to a minimum. The following are the selected topics:-
 1. **Diadactic lectures-** Biostatistics, use of library, Research methodology, medical code of conduct and medical ethics, National health and disease control programmes and communication skills. These topics are to be preferably taken in the first few weeks of the 1st year of post graduation.
 2. **Integrated lectures-** Recommended to be taken by the multidisciplinary teams fro selected topics like diabetes mellitus, thyroid disorders etc.
- ❖ **Journal club-** To be held once a week. Every candidate must participate in the discussion and should present a minimum of four articles every year and a total of 12 presentations by the end of three years.
- ❖ **Subject seminars-** To be held once a week. All the students are expected to actively participate and enter the relevant details in the log book. Every candidate must have presented a total of 12 seminar topics by the end of three years.
- ❖ **Student symposium-** The evaluation may be similar to the described subject seminars. Recommended as an optional multidisciplinary programme.

- ❖ **Case presentations-** Each postgraduate must have presented 20 clinical cases for discussions in the three year posting.(10 in obstetrics and 10 in gynaecology).
- ❖ **Attending OPD work.**
- ❖ **Ward Rounds-** Ward rounds may be service or teaching rounds.
 1. Service rounds- Post graduates should do rounds everyday for the care of the patient. Newly admitted patients are to be evaluated and presented to the seniors the following day.
 2. Teaching rounds- Every unit should have grand rounds for all the post graduates. Entries should be made in the log books.
- ❖ **Clinico-pathological meetings-** Recommended once a year for all postgraduates. Presentation is done by rotation. If cases are not available due to lack of clinical post-mortems, it can be supplemented by published CPCs.
- ❖ **Inter departmental meetings-** Strongly recommended with departments of pathology, radiology and paediatrics. These meetings should be attended by the postgraduates and all the entries are to be made in the log books.
- ❖ **Continuing medical education programmes (CME)-** Recommended that at least 1 state level conference and 1 national conference have to be attended by each student in 3 years.
- ❖ **Log book-** Every student must make a record of interesting cases attended to during their duties, procedures performed, procedure assisted, seminars, journal clubs, case presentations, conferences and workshops.

DISSERTATION

- ❖ Every postgraduate is required to carry out work on a selected research project under the guidance of a recognized postgraduate teacher. The results of such work shall be submitted in the form of dissertation.

- ❖ The aim is to train the postgraduates 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 synopsis will be reviewed and the dissertation topic will be registered by the deemed university. No change in the dissertation topic or guide shall be made without prior approval of the university.
- ❖ Dissertation should be written under the following headings-
 - i) Introduction
 - ii) Aims and objectives of study
 - iii) Review of literature
 - iv) Material and methods
 - v) Results
 - vi) Discussion
 - vii) Conclusion
 - viii) Summary
 - ix) References
 - x) Tables
 - xi) Annexure
- ❖ The written dissertation must be 50-150 pages including all the references, tables, questionnaires and other annexure
- ❖ Spiral binding must be avoided.
- ❖ The dissertation must be certified by the guide, head of the department and head of the institution.
- ❖ It should be typed with double line spacing on one side paper (A4 size, 8.27”x 11.69”) and bound properly.

- ❖ Four copies of the dissertation are to be submitted to the registrar (evaluation), six months before final examination on or before the dates notified by the university.
- ❖ Approval of the dissertation work is an essential precondition for a candidate to appear in the university examination.

FORMATIVE ASSESSMENT

Formative assessment should be continual and should assess medical knowledge, patient care, procedural and academic skills, interpersonal skills, professionalism, self directed learning and ability to practice in the system.

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.

Quarterly assessment during the MS training should be based on following educational activities:

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 / CME's

POSTGRADUATE STUDENTS APPRAISAL FORM

Pre / Para / Clinical disciplines

Name of Departmental/unit :

Name of the PG student :

Period of training : FROM.....TO.....

Sr. No.	Particulars	Not Satisfactory			Satisfactory			More than Satisfactory			Remarks
		1	2	3	4	5	6	7	8	9	
1.	Journal based/recent advances learning										
2.	Patient based/Laboratory or skill based learning										
3.	Self directed learning and teaching										
4.	Departmental and interdepartmental learning activity										
5.	External and Outreach activities/CME's										
6.	Thesis/Research work										
7.	Log book Maintenance										

COMPETENCY ASSESSMENT

❖ OVERALL

- a) Communication/commitment/contribution/compassion towards patients and innovation ()
- b) Implementation of newly learnt techniques/skills () - **5 Marks**
- ❖ Number of cases presented in clinical meetings / journals / seminars - **5 Marks**
- ❖ Number of posters/papers presented in conferences/publications and Research projects - **5 Marks**
- ❖ No. of medals/certificates won in conferences/quiz competitions and other academic meetings with details - **5 Marks**
- Total - **20 marks**

SCHEME OF EXAMINATION

A. THEORY

- Paper I : Applied Basic sciences.
- Paper II : Obstetrics including social obstetrics and Diseases of New Born
- Paper III : Gynaecology including fertility regulation
- Paper IV : Recent Advances in Obstetrics & Gynaecology

There shall be four question papers, each of three hours duration. Each paper shall consist of 10 short essay questions carrying 10 marks each .Total marks for each paper will be 100.

Paper I	= 100 Marks
Paper II	= 100 Marks
Paper III	= 100 Marks
Paper IV	= 100 Marks
Total	400 Marks

B. Practicals / Clinical and Oral Examination (300 Marks)

❖ There shall be two long cases and two short cases to be examined and presented.

❖ Total marks- 200.

Types of cases:-

1. Long cases- One case of obstetrics and one case of gynaecology each of 50 marks.
2. Short cases- two short cases of obstetrics, 20 marks each.
Two short cases of gynaecology 20 marks each.
One spotter in obstetrics for 10 marks
One spotter in gynaecology for 10 marks

C. Viva Voce

❖ Total marks-100

1. Viva voce examination (80 Marks)

Obstetrics

- ❖ Instruments - 05 marks
- ❖ Drugs - 10 marks
- ❖ Xray, Sonography, CTG - 10 marks
- ❖ Dummy pelvis - 10 marks
- ❖ Specimen - 10 marks

Gynaecology

- Instruments - 05 marks
 - Drugs - 10 marks
 - Specimen - 10 marks
 - Family planning - 10 marks
 - Xray, sonography and endoscopy - 10 marks
2. Pedagogy - 20 marks

Maximum marks for M.S. OBG

Maximum marks for M.S. Obstetrics and Gynaecology	Theory	Practical & Viva	Grand Total
	400	300 (Practical – 200 & Viva – 100)	700

MARKS QUALIFYING FOR A PASS

Obtaining a minimum of 40% marks in each theory paper and not less than 50% cumulatively in all the four papers for degree examination. Obtaining of 50% marks in Practical examination shall be mandatory for passing the examination as a whole in the said degree examination

OSCE- DETAILED SCHEME

Communication skills	Manned, counselling, consulting, breaking news, Bereavement
Clinical examination	❖ Manned ❖ Mannequin ❖ PAP ❖ AMSTL ❖ Catheterization
Out patient procedures	CTG, USG, Endometrial sampling
In patient procedures	Episiotomy, uterine inversion correction, MRP laparoscopy, Hysteroscopy
Spotter on laptop	Vulval lesion slides, Vaginal lesions, STD, Endocrine, Endometriosis, Ectopic pregnancy, Uro-gynaecology, Surgical procedures, oncology
Partogram	

RECOMMENDED BOOKS

OBSTETRICS

- 1) Ian donald
- 2) Fernando Aria's
- 3) William's
- 4) Jeffcoat's
- 5) Dutta's
- 6) Oxorne foote's
- 7) Arul kumaran
- 8) Mudaliar
- 9) Jame's
- 10) Padubidri
- 11) Rathnam
- 12) Parulekar
- 13) Lakshmi sheshadri
- 14) Munroker's
- 15) Holland

GYNAECOLOGY

1. William's
2. Dutta's
3. Shaw's
4. Te linde's
5. Speroffs
6. Lakshmi sheshadri
7. Berek and novak's
8. Shaw's operative gynaecology
9. Boney's
10. Dewhurst's
11. Callan's
12. Kistner's
13. Studd's
14. C S Dawn's Bhaskar rao

JOURNALS

- 1) FOGSI
- 2) Clinics of obstetrics and gynaecology North America
- 3) British journal of obstetrics and gynaecology
- 4) American journal of obstetrics and gynaecology
- 5) American association of gynaecological laparoscopy
- 6) Current opinion on obstetrics and gynaecology
- 7) Brigg's update: Drugs in pregnancy and lactation
- 8) Operative techniques in gynaecological surgery
- 9) Fertility and sterility
- 10) Obstetrics and gynaecology clinic