MS Obstetrics & Gynaecology

Curriculum and Syllabus 2011

Branch Code: 17

SRM Medical College Hospital & Research Centre
SRM University
SRM Nagar, Kattankulathur
Kancheepuram (Dt). 603 203
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MS OBSTETRICS AND GYNAECOLOGY

1A.GOALS:

1. To acquire knowledge of anatomy, physiology, pharmacology and pathophysiology related to reproductive system..
2. To be able to clinically diagnose the diseases related to reproductive system and to do appropriate investigations and manage them by medical, surgical and other relevant modalities.
3. To acquire thorough knowledge of physiology of normal pregnancy and its diagnosis and Management.
5. Basics in neonatal care.

B.OBJECTIVES:

KNOWLEDGE

1. To acquire thorough knowledge of Obst & Gynaecology, principles of medicine, surgery, and allied specialities.
2. Knowledge of basic sciences relevant to Obstetrics and Gynaecology.
3. Update on self study, attending seminars, conference and workshops, for Obstetrics and Gynaecology.
4. Research oriented work with the aim of publishing papers in national & international forums.
5. Plan and carry our scientific research (clinical / experimental) in specialty of Obstetrics & Gynaecology.
6. Be familiar with modern methods of teaching

SKILLS:

1. Provide quality care to the community in the diagnosis and management of Antenatal, Intra-natal and Post-natal period of normal and abnormal pregnancies.
2. Provide effective and adequate care to the obstetrical and neonatal diseases. Be able to effectively manage obstetrical emergencies.
3. Manage common gynaecological problems and emergencies.
4. Develop adequate surgical skills to manage common obstetrical &
gynaecological problems.
5. Provide counseling and delivery of fertility regulation methods and perform
medical termination of pregnancy.
6. Organize and implement the “National Health Programs” pertaining to
Women’s Health.
7. Be well versed with preventive aspects in Obstetrics and Gynecology.
8. Properly maintain medical records and know the Medico- legal aspects and
laws in respect of obstetrical & gynaecological practice.
9. Keep abreast with advances in the field of Obstetrics & Gynaecology.
10. Involved in educational program in Obstetrics & Gynaecology (with
seniors) for medical and paramedical staff and also for the society.
11. Develop communication skill and demonstrate compassionate attitude

ETHICAL:

1. Professional honesty and integrity to be fostered
2. Respect Patient’s right to information and right to seek second opinion.
3. To concern about safety of the patient
4. Taking to account social and economic, environmental aspects while planning
diagnostic procedures and treatment.

2. COURSE OVERVIEW

DURATION OF THE COURSE

The period of certified study and training for the Post-Graduate MS
OBSTETRICS AND Gynaecology shall be Three Academic years.(six academic
terms). The academic terms shall mean six months training period.

COMMENCEMENT OF ACADEMIC SESSION

The academic session for the Post-Graduate shall commence from May 2nd
of the Academic Year.
DATE OF EXAMINATION
The students admitted up to May 31st of the academic year shall be registered for that academic year and shall take up their Final Third Year regular examination in April of the due year and October of the academic year after completion of 3 years.

NUMBER OF EXAMINATIONS
The University shall conduct not more than two examinations in a year, for any subject, with an interval of not less than 4 and not more than 6 months between the two examinations.

ATTENDANCE
All students joining the postgraduate training programme shall work as full time residents during the period of training, attending not less than 80% (eighty percent) of the training during each calendar year, and will be given full time responsibility, assignments and participation in all facets of the educational process.

The period of training for obtaining the degrees shall be three completed years including the period of examination.

3. COURSE CONTENT

THEORY

Paper I: Applied Basic sciences

Paper II: Obstetrics including social obstetrics & diseases of newborn

Paper III: Gynaecology including family planning

Paper IV: Recent Advances in Obstetrics & Gynaecology
CLINICAL / PRACTICAL

OBSTETRICS
Clinical

Long case: 1 case
Short case/ spotter: 1
Viva including
i. Dummy pelvis & skull
ii. Imaging: X-rays, Sonography, cardiotocography etc
iii. Instruments
iv. Pathology specimens
v. Drugs

GYNAECOLOGY
Clinical
Long case: 1 case
Short case/ Spotter: 1
Viva including
i. Instruments
ii. Pathology specimens
iii. Drugs
iv. Imaging: X-rays, sonography etc
v. Family planning

4. DETAILED SYLLABUS

THEORY

Paper I
Basic Sciences
Anatomy & Physiology
1. Normal and abnormal development structure and function (female and male) urogenital system and female breast.
2. Applied anatomy of genito-urinary system, abdomen, pelvis, pelvic floor, anterior abdominal wall, upper thigh (inguinal ligament, inguinal canal, vulva, rectum and anal canal).
3. Anatomy and physiology of urinary and lower GI tract (rectum / anal canal).
4. Development, structure and function of placenta, umbilical cord and amniotic fluid.
5. Anatomical and physiological changes in female genital tract during pregnancy.
7. Physiological and neuro-endocrinal changes during puberty, adolescence, menstruation, ovulation, fertilization, climacteric and menopause.
8. Physiology of spermatogenesis.
9. Endocrinology related to male and female reproduction
10. Biochemical and endocrine changes during pregnancy, including systemic changes in cardiovascular, hematological, renal, hepatic and other systems.
12. Pharmacology of identified drugs used during pregnancy, labour, post partum period in reference to their absorption, distribution, excretion, metabolism, transfer of the drugs across the placenta, effect of the drugs on labour, on fetus, their excretion through breast milk.
13. Mechanism of action, excretion, metabolism of identified drugs used in the management of Gynaecological disorders.
14. Role of hormones in Obstetrics & Gynaecology.
15. Markers in Obstetrics & Gynaecology – Non-neoplastic and neoplastic diseases.
16. Pathophysiology of ovaries, fallopian tubes, uterus, cervix, vagina and external genitalia in healthy and diseased conditions.
17. Normal and abnormal microbiology of genital tract. Bacterial, viral and parasitical infections responsible for maternal, fetal and gynaecological disorders.
18. Gametogenesis, fertilization, implantation and early development of Embryo
19. Normal and abnormal pathology of placenta, umbilical cord, amniotic fluid and fetus
21. Immunology of pregnancy
22. Humoral and cellular immunology in Obstetrics & Gynaecology

Medical Genetics
1. Basic medical genetics including cytogenetics.
2. Pattern of inheritance.
4. General principles of teratology.
5. Screening, counseling and prevention of developmental abnormalities.

Paper II
CLINICAL OBSTETRICS
Antenatal
1. Prenatal care of normal pregnancy including examination, nutrition, immunization and follow-up.
2. Identification and management of complications and complicated pregnancy – abortion, ectopic pregnancy, vesicular mole, gestational trophoblastic diseases, hyperemesis gravidarum, multiple pregnancy, antepartum hemorrhage, pregnancy induced hypertension, preeclampsia, eclampsia, anemia, Rh incompatibility, diabetes, heart disease, renal and hepatic diseases, preterm – post term pregnancies, intrauterine fetal growth retardation, hydramnios, oligohydramnios, PROM.
3. Identification and management of neurological, hematological, dermatological diseases, immunological disorders and other medical and surgical disorders / problems associated with pregnancy.
4. Diagnosis of contracted pelvis (CPD) and its management.
5. Evaluation of fetal and maternal health in complicated pregnancy by making use of diagnostic modalities including modern ones (USG, Doppler, Electronic monitors) and plan for safe delivery for mother and fetus. Identifying fetus at risk and its management.
6. Infections in pregnancy (bacterial, viral, fungal, protozoal)
a. Malaria, toxoplasmosis
b. Viral – rubella, CMV, herpes, HIV, hepatic viral infections
c. Sexually transmitted infections (STIs)
d. Mother to fetal transmission of infections
7. Identification and management of fetal malpositions and malpresentations.
9. Gynaecological disorders associated with pregnancy – congenital genital tract developmental anomalies, gynae pathologies – fibroid uterus, CaCx, genital prolapse etc.
11. MTP, PNDT Act etc.
12. National Health MCH Programs, social obstetrics and vital statistics
13. Recent advances in obstetrics

**Intrapartum**
1. Normal labour – mechanism and management
2. Partographic monitoring of labour progress, recognition of abnormal labour and its appropriate management.
3. Identification and conduct of abnormal labour and complicated delivery – breech, forceps delivery, cesarean section, destructive operations.
4. Induction and augmentation of labour.
5. Management of abnormal labour – abnormal pelvis, soft tissue abnormalities of birth canal, malpresentation, malpositions of the fetus, abnormal uterine action, obstructed labour and other dystocias
8. Analgesia and anaesthesia in labour
Postpartum
1. Identification and management of genital tract trauma – perineal tear, cervical / vaginal tear, episiotomy complications, rupture uterus.
3. Postpartum shock, sepsis and psychosis.
4. Postpartum contraception.
8. Hematological problems in obstetrics including coagulation disorders. Use of blood and blood components / products. Operative obstetrics: PG students must have performed routine procedures and assisted/ observed uncommon procedures.
9. Decision-making, technique and management of complications.
10. Vaginal instrumental delivery, cesarean section, obstetric hysterectomy, destructive operations, manipulations (external / internal podalic version, manual removal of placenta etc.)

Newborn
1. Care of newborn: Normal and high risk new born (including NICU care).
2. Asphyxia and neonatal resuscitation.
5. Birth trauma – detection and management.
Paper III
Clinical Gynaecology
1. Epidemiology and etiopathogenesis of gynaecological disorders.
2. Diagnostic modalities and management of common benign and malignant gynaecological diseases (diseases of genital tract)
   a. Fibroid uterus
   b. Endometriosis and adenomyosis
   c. Abnormal Uterine Bleeding
   d. Endometrial hyperplasia
   e. Genital prolapse (uterine and vaginal)
   f. Cervical erosion, cervicitis, cervical polyps, cervical neoplasia
   g. Vaginal cysts, vaginal infections, vaginal neoplasia (VIN)
   h. Benign ovarian pathologies
   i. Malignant genital neoplasia – of ovary, fallopian tubes, uterus, cervix, vagina, vulva and gestational trophoblastic diseases, Ca breast
3. Diagnosis and surgical management of clinical conditions related to congenital malformations of genital tract. Reconstructive surgery in gynaecology.
4. Intersex, ambiguous sex and chromosomal abnormalities.
5. Infertility – evaluation and management.
   a. Methods of ovulation induction
   b. Tubal (micro) surgery
   c. Management of immunological factors of infertility
   d. Male infertility
   e. Obesity and other infertility problems
   f. Introductory Knowledge of advanced assisted reproductive techniques (ART)
6. Reproductive tract infections: Prevention, diagnosis and treatment
   a. STD
   b. HIV
   c. Genital tuberculosis
   d. Other infections
7. Principles of radiotherapy and chemotherapy in gynaecological malignancies. Choice, schedule of administration and complications of such therapies.

8. Rational approach in diagnosis and management of endocrinal abnormalities such as: menstrual abnormalities, amenorrhea (primary / secondary), dysfunctional uterine bleeding, polycystic ovarian disease, hyperprolactinemia (galactorrhoea), hyperandrogenism, thyroid – pituitary – adrenal disorders.

9. Urological problems in gynaecology – Diagnosis and management
   a. Urinary tract infection
   b. Urogenital injury and fistulae
   c. Urinary Incontinence
   d. Other urological problems

10. Menopause: management (HRT) and prevention of its complications

11. Endoscopy (laparoscopy – hysteroscopy)
   a. Diagnostic and simple therapeutic procedure (PG students must be trained to do these procedures).
   b. Recent advances in gynaecology – diagnostic and therapeutic
   c. Introduction to advanced operative procedures

**Operative Gynaecology**

1. Abdominal incisions, suture material, instruments and knotting
2. Abdominal and vaginal hysterectomy
3. Surgical procedures for genital prolapse, fibromyoma, endometriosis, ovarian adnexal, uterine, cervical, vaginal and vulval pathologies.
4. Surgical treatment for urinary and other fistulae, urinary incontinence
5. Operative endoscopy

**Family Welfare and Demography**

1. The importance of demography in obstetrics and gynecology.
3. Organizational and operational aspects of National Health Policies and Programs, in relation to population and family welfare including RCH.
4. Knowledge of contraceptive techniques both female & male (including recent developments)
   a. Temporary methods
   b. Permanent methods
   c. Recent advances in contraceptive technology
5. Provide adequate services to service seekers of contraception including follow-up.
6. Medical termination of pregnancy: act, its implementation, providing safe and adequate services.
7. Population dynamics

**Paper- IV**: Recent advances in Obstetrics and Gynaecology
Recent guidelines and Evidence based approach

**PRACTICAL TRAINING**
Operative skills in Obstetrics and Gynaecology
1. Adequate proficiency in common minor and major operations, postoperative management of their complications.
2. Operative procedures must be done by PG students during training period (in graded manner – assisting, operating with senior person assisting, operating under supervision).

**Operations TO BE PERFORMED/ OBSERVED during PG Residency and Log Book maintenance**

**Obstetrics**
1. Conduct normal deliveries
2. Episiotomy and its repair
3. Application of forceps and ventouse (10)
4. Assisted breech delivery
5. Cesarean section delivery (10 must be done)
7. Amnioinfusion, Amniocentesis (therapeutic)
8. Management of genital tract obstetrical injuries
9. Post partum sterilization / minilap tubal ligation (20 must be done)
10. Medical termination of pregnancy – various methods (20 must be done)
11. Venesection
12. Culdocentesis
Gynaecology
1. Endometrial / cervical biopsy
2. Dilatation and curettage
3. Evacuation
4. Culdocentesis, colpotomy
5. Opening and closing of abdomen (10 must be done)
6. Operations for utero-vaginal prolapse
7. Ovarian cyst operation
8. Operation for ectopic pregnancy (2)
9. Vaginal and abdominal hysterectomy (5 must be done)
10. Basic Laparoscopic skills
11. Laparoscopic sterilization

Operations must be OBSERVED AND/OR ASSISTED when possible
1. External Cephalic Version
2. Internal podalic version
3. Caesarean Hysterectomy
4. Internal iliac artery ligation
5. Destructive obstetric operations
6. Vaginal reconstructive surgery
7. Tubal microsurgery
8. Radical operations for gynaecologic malignancies
9. Repair of genital fistulae
10. Operations for urinary incontinence
11. Myomectomy
12. Diagnostic & Operative Laparoscopic surgery
13. LEEP, Cryotherapy, Electrocautery
14. IUI

Diagnostic Procedures
1. Interpretation of x-rays – Twins, common fetal malformations/ mal-presentations, abnormal pelvis (pelvimetry), Hysterosalpingigraphy
2. Sonographic pictures at various stages of pregnancy – normal and abnormal pregnancies, Fetal biophysical profile & doppler study, common
gynaecological pathologies.
4. Amniocentesis
5. Fetal surveillance methods – Electronic fetal monitoring and its interpretation
6. Post coital test
7. Cervical Pap Smear – VIA / VILI (visual inspection with acetic acid / visual inspection with Lugol’s iodine)
8. Colposcopy

**Health of Adolescent Girls and Post Menopausal Women**
1. Recognize importance of good health of adolescent and postmenopausal women.
2. Identification and management of health problems of postmenopausal women.
3. Understanding and planning and intervention program of social, educational and health needs of adolescent girls & menopausal women.
4. Education regarding rights and confidentiality of women’s health, specifically related to reproductive function, sexuality, contraception and safe abortion.
5. Geriatric problems.

**Reproductive tract and ‘HIV’ Infection**
1. Epidemiology of RTI and HIV infection in Indian women of reproductive age group.
2. Cause, effect and management of these infections.
3. HIV infections in pregnancy, its effects and management.
4. Relationship of RTI & HIV with gynecological disorders.
5. Planning and implementation of preventive strategies.
**Medicolegal Aspects**
1. Knowledge and correct application of various acts and laws while practicing obstetrics and gynecology, particularly MTP act and sterilization, Preconception and P.N.D.T. Act.
2. Knowledge of importance of proper recording of facts about history, examination findings, investigation reports and treatment administered in all patients.
3. Knowledge of steps recommended for examination and management of rape cases.
4. Knowledge of steps taken in the event of death of a patient.
5. Proper consent taking in Obstetrics and Gynecology.

**Environment and Health**
1. Concept of safe disposal of human body fluids and other materials.
2. Universal precautions need to be taken in examination and surgical procedures for the prevention of HIV and other diseases.
   - Effect of environment on pregnancy outcome.

**TEACHING SCHEDULE**
**TRAINING PROGRAMME**
**DETAILS OF TRAINING :**

**FIRST YEAR ;**

- Labour ward 4 months
- Antenatal Ward/ OPD 2 months
- Gynaecology ward / OPD 2 months
- General Medicine Department 1 month
- General Surgery department 1 month
- Community Obstetrics 1 month
- Ultra sound 15 days
- Research methodology& computer training 15 days

**TOTAL 12 MONTHS**
SECOND YEAR

Labour ward 3 months
Antenatal ward / OPD 2 months
Gynaecology ward/ OPD 2 months
Post Natal ward 2 months
Neonatology 1 month
Oncology 1 month
1. Medical Oncology (10 days)
2. Surgical Oncology (10 days)
3. Radio Oncology (10 days)
At Kanchipuram cancer institute
Family welfare 1 month

TOTAL 12 MONTHS

THIRD YEAR

Labour ward 2 months
Antenatal ward / OPD 2 months
Gynaecology ward/ opd 2 months
Anaesthesia Department 1 month
Medical genetics Department 15 days
Community obstetrics (Urban & Rural) 1 month
Endoscopy 1 month
Uro Gynaecology 15 days
Endocrinology 15 days
High dependency unit 15 days
Fertility Research centre 1 month

TOTAL 12 MONTHS

Note: The post graduate Student should attend the regular outpatient department of their parent unit and do the night duties in their parent unit on every admission days . They should make a record of Obstetric and Gynaec emergencies they have attended in their log books.
5. **MAINTENANCE LOG BOOK**
Each student should be required to maintain in log book in which following details will be entered.

a) Investigation performed by him.
b) Presentations in journal clubs along with title and journal & issue with title.
c) Cases presented in clinical meetings with other departments.
d) Presentations in departmental rotation.
e) Schedule of interdepartmental rotation.
f) Details of apprenticeship.
g) conference attended national/ international.
h) Papers presented at conference with title name of the conference, date of presentation.
i) Paper published with title, name & issue of the journal.
j) Surgeries done and assisted.
k) Interesting cases.

5.1 It is preferable that a post graduate student during the course to present one poster presentation and / or to read one paper at a national / state conference and / or to present one research paper which can be published/ accepted for publication/ sent for publication during the period of his/ her postgraduate studies.

**TEACHING METHOD :**
The following methods are to be used for the teaching of the post-graduate students.

1. Journal Club - 1 hour duration II & IV Wednesday
2. Symposium or Seminar - I & II Wednesday
   • One by post graduates
   • One by faculties
3. Lecture - Once a month
4. Clinical discussion - Once in a week (Every Tuesday)
5. Clinical meeting - Twice in a month - Interesting cases
6. Integrated teaching - II & IV Thursday
7. Basic science class - I & IV Monday
8. Mortality & Morbidity Audit (Maternal) - III Thursday
9. Mortality & Morbidity Audit (Perinatal) - III Friday
10. Thesis discussion - Once a month - II Monday

MONTHLY TEACHING PROGRAMME

- OP 11 AM – 12 Noon Case discussion - in the respective units.
- Non op days - Ward rounds & bed side discussion - in the respective units.
- Grand rounds - every Saturday - by professors in turn.

AFTERNOON (2.30 TO 4.30 PM)
1. Journal Club - 1 hour duration II & IV Wednesday
2. Symposium or Seminar - I & II Wednesday
   - One by post graduates
   - One by faculties
3. Lecture - Once a month
4. Clinical discussion - Once in a week (Every Tuesday)
5. Clinical meeting - Twice in a month - Interesting cases Presentation & discussion - II & IV Thursday.
6. Integrated teaching - II Friday
7. Basic science class - I & IV Monday
8. Mortality & Morbidity Audit (Maternal) - III Thursday
9. Mortality & Morbidity Audit (Perinatal) - III Friday
10. Thesis discussion - Once a month - II Monday
11. Theory test - Once a month - II Monday
12. Clinical exam - Once in 3 months - I Thursday
6. THESIS

Every student registered as 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 theoretical 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
(h) Tables
(i) Annexure
(j) Bibliography

Four copies of thesis shall be submitted six months prior to the commencement of the theory examinations on the date prescribed by the Controller of Examinations of this University. The thesis should be approved by the Professor of that branch and the same has to be forwarded to the Controller of Examinations, by the head of the department through the Dean of the college.
Two copies in addition are to be submitted as an electronic version of the entire thesis in a standard C.D. format by mentioning the details and technicalities used in the C.D. format.

The thesis 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; and on the acceptance of the thesis by two examiners, the student shall be allowed to appear for the final examination.

EVALUATION OF THESIS:

ACCEPTED / NOT ACCEPTED

No marks will be given

7. SCHEME OF EXAMINATION

A) MARKS DISTRIBUTION

<table>
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<tr>
<th>Theory</th>
<th>Title</th>
<th>Duration in hrs</th>
<th>Max. marks</th>
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<tr>
<td>PAPER-I</td>
<td>Applied Basic sciences</td>
<td>3</td>
<td>100</td>
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<tr>
<td>PAPER-II</td>
<td>Obstetrics including social obstetrics &amp; diseases of newborn</td>
<td>3</td>
<td>100</td>
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<tr>
<td>PAPER-III</td>
<td>Gynaecology including family planning</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>PAPER-IV</td>
<td>Recent Advances in Obstetrics &amp; Gynaecology</td>
<td>3</td>
<td>100</td>
</tr>
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CLINICAL/PRACTICAL:

OBSTETRICS

Clinical

Long case: 1 case ------------------ 70 MARKS
Short case/ spot case: 1 case-------30 MARKS
Viva                  50 MARKS

Total                     150
(Includes)
i. Dummy pelvis & skull
ii. Imaging: X-rays, Sonography, cardiotocography etc
iii. Instruments
iv. Pathology specimens
v. Drugs

GYNAECOLOGY

Clinical
Long case: 1 case -----------------70 MARKS
Short case / Spot case: 1 case------30 MARKS
Viva 50 MARKS

Total 150

(Includes)
i. Instruments
ii. Pathology specimens
iii. Drugs
iv. Imaging: X-rays, sonography etc
v. Family planning

Grand Total: 300

MARKS QUALIFYING FOR A PASS

<table>
<thead>
<tr>
<th>MARKS QUALIFYING FOR A PASS</th>
<th>MAXIMUM MARKS</th>
<th>QUALIFYING FOR A PASS 50% MARKS</th>
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<tr>
<td>Theory Examination</td>
<td>400</td>
<td>200</td>
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<tr>
<td>Practical Including clinical and Viva voce examination</td>
<td>300</td>
<td>150</td>
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A student 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.
8. EXAMINATION AND EVALUATION

(1) EXAMINERS

(a) All the Post Graduate Examiners shall be recognised Post Graduate Teachers holding recognised Post Graduate qualifications in the subject concerned.

(b) For all Post Graduate Examinations, the minimum number of Examiners shall be four, out of which at least two (50%) shall be External Examiners, who shall be invited from other recognised universities from outside the State and other two will be internal examiners for M.S.

(c) Under exceptional circumstances, examinations may be held with 3 (three) examiners provided two of them are external and Medical Council of India is intimated the justification of such action prior to publication of result for approval. Under no circumstances, result shall be published in such cases without the approval of Medical Council of India.

(d) In the event of there being more than one centre in one city, the external examiners at all the centres in that city shall be the same. Where there is more than one centre of examination, the University shall appoint a Supervisor to coordinate the examination on its behalf.

(e) The guidelines regarding appointment of examiners are as follows:-

1. No person shall be appointed as an examiner in any subject unless he fulfils the minimum requirements for recognition as a Post Graduate teacher as laid down by the Medical Council of India and has teaching experience of 8 (Eight) years as a Lecturer / Assistant Professor out of which he has not less than 5 (Five) years teaching experience after obtaining Post Graduate degree. For external examiners, he should have minimum three years experience of examiner ship for Post Graduate diploma in the concerned subject. Out of internal examiners, one examiner shall be a professor and Head of Department or Head of Department.
2. There shall be at least four examiners in each subject at an examination out of which at least 50% (Fifty percent) shall be external examiners. The external examiner who fulfils the condition laid down in clause – 1 above shall ordinarily be invited from another recognised university, from outside the State: provided that in exceptional circumstances examinations may be held with 3 (three) examiners if two of them are external and Medical council of India is intimated with the justification of such examination and the result shall be published in such a case with the approval of Medical council of India.

3. An external examiner may be ordinarily been appointed for not more than three years consecutively. Thereafter he may be reappointed after an interval of two years.

4. The internal examiner in a subject shall not accept external examiner ship for a college from which external examiner is appointed in his subject.

5. The same set of examiners shall ordinarily be responsible for the written, practical or part of examination.

6. In the event of there being more than one centre in one city, the external examiners at all the centres in the city shall be the same.

7. There shall be a Chairman of the Board of paper – setters who shall be an external examiner and shall moderate the question papers.

8. Where there is more than one centre of examination, there shall be Co-ordinator appointed by the University who shall supervise and Co-ordinate the examination on behalf of the University with independent authority.

9. The Head of the Department of the institution concerned shall ordinarily be one of the internal examiners and second internal examiner shall rotate after every two year.

(2) **Number of candidates**

The maximum number of candidates to be examined in Clinical / practical and Oral on any day shall not exceed eight for M.S. degree examination.
3) Number of examinations

The university shall conduct not more than two examinations in a year, for any subject, with an interval of not less than 4 and not more than 6 months between the two examinations.

4) Master of Surgery (M.S.) Obstetrics & Gynaecology

M.S. examination shall consist of Thesis, Theory Papers, and clinical/Practical and Oral examinations.

(a) Thesis

Every candidate shall carry out work on an assigned research project under the guidance of a recognised Post Graduate Teacher, the result of which shall be written up and submitted in the form of a Thesis.

Work for writing the Thesis 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. Thesis shall be submitted at least six months before the theoretical and clinical/practical examination.

The thesis 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; and on the acceptance of the thesis by two examiners, the candidate shall appear for the final examination.

(b) Theory

(i) There shall be four theory papers.

(ii) Out of these one shall be of Basic Medical Sciences and one shall be of recent advances.

(iii) The theory examinations shall be held sufficiently earlier than the Clinical and Practical examination, so that the answer books can be assessed and evaluated before the start of the Clinical/Practical and Oral examination.
(c) Clinical / Practical and Oral

(i) Clinical examination for the subjects in Clinical Sciences shall be conducted to test the knowledge and competence of the candidates for undertaking independent work as a specialist/Teacher, for which candidates shall examine a minimum one long case and two short cases.

(ii) Practical examination for the subjects in Basic Medical Sciences shall be conducted to test the knowledge and competence of the candidates for making valid and relevant observations based on the experimental/Laboratory studies and his ability to perform such studies as are relevant to his subject.

(iii) The Oral examination shall be thorough and shall aim at assessing the candidate knowledge and competence about the subject, investigative procedures, therapeutic technique and other aspects of the speciality, which form a part of the examination.

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.

Evaluation of Answer Scripts

The answer books will be valued by two examiners. One of the two examiners will be from this university and the other will be from any other university. The average of the two marks secured by the candidate will be taken into account. If the difference between two marks exceeds 10%, the answer scripts shall be valued by the third examiner. The average of the nearest two marks shall be considered as the final mark.
WRITE NOTES ON:

I. ANATOMY  
1. Describe bony pelvis  
2. Anatomy of female urinary continence  
3. Describe the histology of Graffian follicle  
4. Cloaca

II. PHYSIOLOGY  
1. Briefly discuss the physiology of labour.  
2. What are the cardiac changes in pregnancy?  
3. Write a note on physiology of lactation  
4. Rh factor

III. BIOCHEMISTRY  
1. Discuss the bilirubin metabolism  
2. What is triple screening?  
3. Sodium pump

IV. PHARMACOLOGY  
1. Methotrexate  
2. Prostaglandins in obstetrics  
3. Letrazole

V. MICROBIOLOGY  
1. TORCH infection  
2. Group B streptococcus  
3. ELISA

VI. PATHOLOGY  
1. Describe the pathology of granulose cell tumor  
2. MHC complex  
3. Pathological changes in placenta
I. Essay question: 2x20=40

1. 25 yr old primi gravida reports to antenatal op with over distended uterus at 30 wks of gestation. Discuss the differential diagnosis. Discuss the common complications of twin pregnancy and its management.

2. 26 yr old G2P1L1 (Previous LSCS) admitted with h/o 9 mths of amenorrhea c/o severe abdominal pain with bleeding per vagina. Discuss the differential diagnosis. How will you manage a case of abruptio placenta?

II. Write notes on: 10x6=60

1. Current concepts in the active management of third stage of labour

2. Diagnosis and management of oligohydramnios

3. Complication of pre term labour

4. Non immune hydrops foetalis

5. Methods of neonatal resuscitation

6. Management of newborn of HIV positive mother

7. Hepatitis A in pregnancy

8. Role of anticoagulants in pregnancy

9. Destructive procedure in modern obstetrics

10. Foetal macrosomia
I. Essay Questions:  

1. Describe the biomechanics of genital prolapse and management of vault prolapse  

2. 18yr old girl comes with h/o of amenorrhoea. Give its causes and management  

II. Write short notes on:  


2. Contraception to newly married couple  

3. Describe the function and importance of post partum unit  

4. Discuss the different methods of artificial reproductive techniques and patient selection for each method  

5. Hormone releasing IUCD  


7. Medical management of DUB.  

8. Classify ovarian tumor and management of epithelial tumors of ovary.  


10. Hysterectomy depression.
M.S Obstetrics and Gynaecology
Paper IV
Recent Advances in Obstetrics & Gynaecology

Time: 3 hrs
Max. Marks = 100

I. Essay Question

1. Discuss the role of ultrasound and serum hormone measurements in the management of early pregnancy complications

2. Discuss the recent advances in the treatment of ovarian cancer with paclitaxel.

II. Write short notes on

1. Role of hysteroscopy in modern gynaecology

2. Recent trends in the management of ectopic pregnancy.

3. Intrauterine insemination

4. Subdermal implants

5. Management of azoospermia in an infertile couple

6. Saline sonohysterography

7. Amniocentesis in modern obstetrics

8. Cordocentesis

9. Regulation of HPO axis

10. RECOMMENDED BOOKS AND JOURNALS


**GYNAECOLOGY**

5. Gynaecologic Pathology – Atlas of essentials Pathology for Gynecologist – Ossama Tawfik, Jaypee Brothers publication, 2006

OBSTETRICS AND GYNAECOLOGY

JOURNALS

1. British journal of Obstetrics and Gynaecology
2. American journal of Obstetrics and Gynaecology
3. International journal of Obstetrics and Gynaecology
4. Journal of Obstetrics and Gynaecology – India
5. Brown journal
6. Recent Advances
7. Progress in Obstetrics and Gynaecology
8. FOGSI focus
9. Yearbook of Obstetrics and Gynaecology
10. Obstetrics and Gynaecological Surgery
11. Fertility and Sterility
12. Population reports
13. Lancet

Success is achieved by Ordinary people with Extraordinary determination
- Edison Montgomery