



SRM
UNIVERSITY
(Under section 3 of UGC Act 1956)



MS Obstetrics & Gynaecology

Curriculum and Syllabus 2015

Branch Code: 17

SRM Medical College Hospital & Research Centre

SRM University

SRM Nagar, Kattankulathur

Kancheepuram (Dt). 603 203

S.NO	CONTENT	PAGE NO
1	GOALS AND OBJECTIVES	04
2	COURSE OVERVIEW.....	05
3	COURSE CONTENT	06
4	SYLLABUS.....	07
5	MAINTENANCE OF LOGBOOK	18
6	THESIS	21
7	SCHEME OF EXAMINATION	22
8	EXAMINATION AND EVALUATION.....	24
9	MODEL QUESTION PAPER	27
10	RECOMMENDED BOOKS & JOURNALS	31

MS OBSTETRICS AND GYNAECOLOGY

1. A. 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.
4. Management of abnormal pregnancy.
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 out 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 /June of the Academic Year.

DATE OF EXAMINATION

The students admitted up to May/ June of the academic year shall be registered for that academic year and shall take up their Final Third Year regular examination in April/October of the academic year after completion of 3 years/ 36 months.

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: 1case

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.
6. Anatomy of fetus, fetal growth and development, fetal physiology and fetal circulation.
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.

11. Biophysical and biochemical changes in uterus and cervix during pregnancy and labour.
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
20. Normal pregnancy, physiological changes during pregnancy, labour and puerperium.
21. Immunology of pregnancy
22. Humoral and cellular immunology in Obstetrics & Gynaecology

Medical Genetics

1. Basic medical genetics including cytogenetics.
2. Pattern of inheritance.
3. Chromosomal abnormalities - types, incidence, diagnosis, management and recurrence risk.
4. General principles of teratology.
5. Screening, counseling and prevention of developmental abnormalities.
6. Birth defects - genetic, teratology and counseling.

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.
8. Acute abdomen (surgical emergencies – appendicitis and GI emergencies).
9. Gynaecological disorders associated with pregnancy – congenital genital tract developmental anomalies, gynae pathologies – fibroid uterus, CaCx, genital prolapse etc
10. Prenatal diagnosis (of fetal problems and abnormalities), treatment – fetal therapy.
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
6. Maternal and fetal monitoring in normal and abnormal labour (including electronic fetal monitoring).
7. Identification and management of intrapartum complications, cord presentation, complication of 3rd stage of labour – retained placenta, inversion of uterus, rupture of uterus, postpartum hemorrhage, postpartum collapse, amniotic fluid embolism, postpartum.
8. Analgesia and anaesthesia in labour.

Postpartum

1. Identification and management of genital tract trauma – perineal tear, cervical / vaginal tear, episiotomy complications, rupture uterus.
2. Management of critically ill woman.
3. Postpartum shock, sepsis and psychosis.
4. Postpartum contraception.
5. Breast feeding practice; counseling and importance of breast-feeding. Problems in breast-feeding and their management, baby friendly practices.
6. Problems of newborn – at birth (resuscitation), management of early neonatal problems.
7. Normal and abnormal puerperium – sepsis, thrombophlebitis, mastitis, psychosis.
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.)
11. Medical termination of pregnancy – safe abortion – selection of cases, technique and management of complications, MTP Law.

Newborn

1. Care of newborn: Normal and high risk new born (including NICU care).
2. Asphyxia and neonatal resuscitation.
3. Neonatal sepsis – prevention, detection and management.
4. Neonatal hyper-bilirubinemia – investigation and management.
5. Birth trauma – detection and management.
6. Detection and management of fetal / neonatal malformation.
7. Management of common neonatal problems.

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.
2. Statistics regarding maternal mortality/morbidity, perinatal mortality / morbidity, birth rate, fertility rate.
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 o 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 maintainance

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)
6. Manual removal of placenta
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.
3. Sonography in infertility: Follicular study and Endometrial study.
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
9. Endoscopy - Laparo& Hysteroscopy.

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.

Medico legal 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.
 - a. 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
Fertility Research centre	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
Community Obstetrics	1 month
Neonatology	1 month
Endoscopy	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)	1month
Oncology	1 month
1. Medical Oncology (10 days)	
2. Surgical Oncology (10 days)	
3. Radio Oncology (10days)]	
UroGynaecology	15 days
High dependency unit	15 days
Family welfare	1 month
Endocrinology	15 days

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 OF 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.
- h) 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 twice a month |
| 2. Symposium or Seminar | - Twice a month |
| • One by post graduates | |
| • One by faculties | |
| 3. Lecture | - Once a month |
| 4. Clinical discussion | - Once in a week |
| 5. Clinical meeting | - Twice in a month - Interesting cases |
| Presentation & discussion | - Twice a month. |
| 6. Integrated teaching | - Once a month |
| 7. Basic science class | - Twice a month |
| 8. Mortality & Morbidity Audit
(Maternal) | - Once a month |
| 9. Mortality & Morbidity Audit
(Perinatal) | - Once a month |
| 10. Thesis discussion | - Once a month |

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 (2.00 TO 4.00 PM)

1. Journal Club - 1 hour duration II & IV Wednesday
2. Symposium or Seminar - I & III 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 - III 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

Theory	Title	Duration in hrs	Max. marks
PAPER-I	Applied Basic sciences	3	100
PAPER-II	Obstetrics including social obstetrics & diseases of newborn	3	100
PAPER-III	Gynaecology including family planning	3	100
PAPER-IV	Recent Advances in Obstetrics & Gynaecology	3	100

CLINICAL/PRACTICAL:

OBSTETRICS

Clinical

Long case: 1case -----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

MARKS QUALIFYING FOR A PASS	MAXIMUM MARKS	QUALIFYING FOR A PASS 50% MARKS
Theory Examination	400	200
Practical Including clinical and Viva voce examination	300	150

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.

* "The postgraduate medical students are required to pass theory and practical examinations separately. An examinee should obtain minimum 40% marks in each theory paper and not less than 50% marks cumulatively in all the four papers for Degree examination to be cleared as "Passed" at the said Degree examination"

**As per Medical Council of India notification date 03.09.2014 and the same approved in the 28th Academic council meet of SRM University held on 23/03/2015.*

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) The guidelines regarding appointment of examiners are as follows;-

1. No person shall be appointed as an examiner in any subject unless he/she 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 examinership for Post Graduate diploma in the concerned subject. Out of internal examiners, one examiner shall be a Professor and Head of Department or Professor.
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 be 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 examinership 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. There shall be a Chairman of the Board of paper – setters who shall be an external examiner and shall moderate the question papers.
7. 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 six 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) 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 20%, the answer scripts shall be valued by the third examiner. The average of the nearest two marks shall be considered as the final mark.

9. MODEL QUESTION PAPERS

M.S OBSTETRICS AND GYNAECOLOGY

PAPER – I

Applied Basic Sciences

Time: 3hrs

Max.Marks-100

WRITE NOTES ON:

I. ANATOMY

5X4=20

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

II. PHYSIOLOGY

5X4=20

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

5X3=15

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

IV PHARMACOLOGY

5X3=15

1. Methotrexate
2. Prostaglandins in obstetrics
3. Letrazole

V. MICROBIOLOGY

5X3=15

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

VI PATHOLOGY

5X3=15

1. Describe the pathology of granulose cell tumor
2. MHC complex
3. Pathological changes in placenta

M.S OBSTETRICS AND GYNAECOLOGY
PAPER II
Obstetrics including social obstetrics & diseases of newborn

Time:3hrs

Max. Marks =100

I. Essay question: 2x20=40

1. 25 yr old primigravida 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 abruption 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

M.S OBSTETRICS AND GYNAECOLOGY
PAPER III
Gynaecology including family planning

Time: 3hrs

Max. Marks =100

I. Essay Questions:

2x20=40

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:

10x6=60

1. Cancer detection programme in rural population.
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
6. Principles of tubal microsurgical recanalisation.
7. Medical management of DUB.
8. Classify ovarian tumor and management of epithelial tumors of ovary.
9. Etiology and management of endometriosis.
10. Hysterectomy depression.

M.S OBSTETRICS AND GYNAECOLOGY
PAPER IV
Recent Advances in Obstetrics & Gynaecology

Time: 3hrs

Max. Marks =100

I. Essay Question

2X20=40

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

10x6=60

1. Role of hysteroscopy in modern gynaecology
2. Recent trends in the management of ectopic pregnancy.
3. Intrauterine insemination
4. Sub dermal implants
5. Management of azoospermia in an infertile couple
6. Saline sonohysterography
7. Amnioinfusion in modern obstetrics
8. Cordocentesis
9. Regulation of HPO axis
10. Biological markers of cervical neoplasia.

10.RECOMMENDED BOOKS AND JOURNALS

1. Mudaliar and Menon's Clinical Obstetrics –A. L.Mudaliar MK Krishna Menon. 11th Edition Universities Press, 2011.
2. Munro Kerr Operative Obstetrics - Thomas F.Baskett Andrew A Calder Sabarathnam Arul Kumaran. 12th Edition Saunders , 2014.
3. Textbook of Obstetrics - D C Dutta. 7th Edition Jaypee Publications, 2013.
4. Practical guide to High risk Pregnancy & Delivery Edition 3,Fernando Arias ,2012.
5. High risk pregnancy management options – James David.K. 4thEdition Elsevier, 2011.
6. Ian Donald's Practical Obstetrics problems - Ian Donald. 7th Edition Renu Misra, LWW, 2014.
7. Manual of Obstetrics - Shirish N Daftary SudipChakravarti. 3th Edition Elsevier, 2011.
8. Textbook of Obstetrics, Neonatology and reproductive and child health education – 16th Edition, C. S. Dawn,Dawn Books,2004.
9. Ultrasound Imaging on fetal anomalies - Kuldeep Singh. Jaypee, 2007.
10. Basic Science in Obstetrics and gynaecology: a textbook for MRLOG part 1- Phillip Bennet Catherine Williamson. 4th Edition Churchill Livingstone 2010.
11. Emergencies in Obstetrics &Gynaecology - Charu Mittal et.al. 1st Edition Pee Pee. 2012.
12. Obstetrics Illustrated - Kevin R. Hanretty Churchill Livingstone. 7th Edition Churchill Livingstone, 2010.
13. The Management of labour–3rd Edition, Arul Kumaran, Gita Arjun & Leonie Penna. Orient Black Swan 2011.
14. Care of Newborn - Meharban Singh. 8th Edition CBS, 2015.

15. Creasy and Resnik's Maternal Fetal Medicine Principles and Practice - Robert Creasy.K. 7th Edition, Saunders publication, 2013
16. Williams Obstetrics - Kenneth Leveno et al. 24th Edition McGraw Hill 2014.

GYNAECOLOGY

1. Howkin's and Bourne Shaw's textbook of Gynaecology - 16th Edition VG Padubidri and Shirish N Daftery, Elsevier, 2015.
2. Berek and Novak's Gynaecology - Jonathan S Berek. 15th Edition Lippincott William and Wilkins, 2011.
3. TeLinde's Operative Gynaecology - John A Rock Howard W Jones III. 10th Edition Lippincott William and Wilkins, 2011.
4. Shaw's Text Book of Operative Gynaecology - John Hawkins, 7th Edition Elsevier, 2013.
5. Gynaecologic Pathology - Atlas of essential Pathology for Gynecology - Ossamma Tawfik, Jaypee Brothers publication, 2006
6. Jeffcoate's principles of gynaecology - Pratap Narendra Kumar Malhotra, 8th Edition Jaypee Brothers, 2014.
7. DC Dutta's Textbook of Gynaecology - Harilal Konar. 6th Edition, Jaypee Publications, 2014.
8. Clinical Gynaecologic endocrinology and Infertility - Marc.A. Fritz & Leon Speroff. 8th Edition Lippincott William and Wilkins, 2010.
9. Step by Step Ultrasound in Gynaecology - Kuldeep Singh & Narendra Malhotra. 2nd Edition Jaypee Brother Publishers, 2010.
10. Principles & Practice of Colposcopy - Shakuntala Baliga. 2nd Edition Jaypee Brother Publishers, 2011
11. Gynaecology Illustrated - Catrina Bain et al. 6th Edition Churchill Livingstone, 2011.
12. Gynaecology Drug handbook - A K Debdas. 2nd Edition Jaypee Brothers, 2008.

13. Williams Gynaecology 2nd Edition - Barbara hoffman ,John Whitridge
Williams, McGraw-Hill , 2012

OBSTETRICS AND GYNAECOLOGY

1. Obstetrics and Gynaecology & Postgraduates – 3rd Edition vol. 2
Sabarathnam Arul Kumaran Sarala Gopalan & Pratap Kumar, Orient Black
Swan, 2010.
2. Dewhurst’s Textbook of Obstetrics and Gynaecology – 8th Edition D. Keith
Edmonds, Black well, 2012.
3. Basic Sciences in Obstetrics and Gynaecology - De Swiet.4th Edition Part-1
Churchill Livingston, 2010.
4. Recent advances in Obstetrics and Gynaecology 9 – Dasgupta. 8th Edition
Jaypee Brothers, Medical Publishers, 2013.
5. Ten teachers Obstetrics and Gynaecology – 19th Edition Book Power, 2011.
6. Current Diagnosis and treatment - Obstetrics and Gynaecology – Alan H
De Chereney et al. 11th Edition McGraw hill, 2012.
7. Harrison’s Textbook of Medicine – S Fauci et al, 2Volume 18th Edition
Anthony McGraw hill, 2015.
8. Ultrasonography in Obstetrics & Gynaecology – 5th Edition, Peter W.
Callen, Saunders publication. 2011.
9. Gynaecology by Ten teachers, Ash Monga & Stephen Dobbs, 19th Edition,
CRC Press, 201.1
10. Obstetrics by Ten teachers, Philip N.Baker & Louise Kenny, 19th Edition,
CRC Press, 2011.

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 deter mination
- Edison Montgomery*

