

**Regulations and Curricula
for
Post Graduate Degree and Diploma Courses
in
Medical Sciences
2000**

**Volume III: Clinical Subjects
M. S. Obstetrics & Gynaecology**



**Rajiv Gandhi University of Health Sciences, Karnataka
4th 'T' Block, Jayanagar, Bangalore - 560 041**

Regulations for Post Graduate Degree and Diploma Courses in Medical Sciences
(Annexure to University Notification No. UA/ORD-6/99-2000 dated 01.01.2000)

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Rajiv Gandhi University of Health Sciences, Karnataka

4th T Block, Jayanagar, Bangalore - 560 041

No. UA/ORD-06/1999-2000

01.01.2000

NOTIFICATION

Sub: Revised Ordinances pertaining to Post Graduate Degree, Diploma
and Super Speciality Courses in Medicine

Ref: Minutes of the 16th syndicate meeting held on 16.11.1999.

In exercise of the powers conferred under Sec. 35(2) of the RGUHS Act, the Syndicate at its meeting held on 16.11.1999 has been pleased to approve the Revised Ordinances pertaining to Post Graduate Degree, Diploma and Super Speciality Courses in Medicine as given in schedule here to annexed.

The Revised Ordinances as above shall come into force immediately and is applicable for University examination of March 2000 and onwards.

By order,
Sd/
REGISTRAR

To

1. The Principals of all Medical Colleges affiliated to RGUHS
2. The Members of the Syndicate/Senate/Academic Council.

Rajiv Gandhi University of Health Sciences, Karnataka
4th T Block, Jayanagar, Bangalore - 560 041

No. UA/ORD-06/1999-2000

26.12.2000

NOTIFICATION

Sub: Revised Ordinance pertaining to PG Degree, Diploma and Super Specialty Courses in Medicine

Read: The Revised Ordinance along with Syllabus and Scheme of Examination of Pre-clinical and Para-clinical subjects pertaining to Postgraduate Degree, Diploma and Super Sociality courses in Medicine as approved by the Syndicate at its meeting held on 16.11.1999 and notified in the University notification No. UA/ORD-6/1999-2000 dt. 01.01.2000. Now the Syndicate at its meeting held on 22.11.2000 has approved Syllabus of Postgraduate Clinical Subjects and the same is notified.

In exercise of the powers conferred under Sec. 35(2) of the RGUHS Act, the Syndicate has been pleased to approve the Curriculum (Syllabus) of following PG Clinical Subjects in respect of above ordinance as given in the schedule here to annexed.

Subject	Degree	Diploma
Anesthesiology	1. M.D.	2. D.A.
Aviation Medicine	3. M.D.	---
Dermatology, Venereology and Leprosy	4. M.D.	5. DDVL
General Medicine	6. M.D.	----
General Surgery	7. M.S.	----
Obstetrics & Gynecology	8. M.S.	9. DGO
Oto-Rhino-Laryngology	10. M.S.	11. DLO
Ophthalmology	12. M.S.	13. DO
Orthopedics	14. M.S.	15. D. Ortho
Pediatrics	16. M.D.	17. DCH
Psychiatry	18. M.D.	19. DPM
Radio-Diagnosis	20. M.D.	21. DMRD
Radiotherapy	22. M.D.	23. DMRT
Tuberculosis & Respiratory Medicine	24. M.D.	25. DTCD

The Syllabus as above shall be applicable from the Academic Year 2000-01.

By order,
Sd/
REGISTRAR

To

1. The Principals of all Medical Colleges affiliated to RGUHS
2. The Members of the Syndicate/Senate/Academic Council.

Regulations for Post Graduate Degree and Diploma Courses in Medical Sciences

Chapter I

1. Branches of Study

1.1 Postgraduate Degree Courses

The following courses of studies may be pursued.

A. M.D. (Doctor of Medicine)

1. Anaesthesiology
2. Aviation Medicine
3. Anatomy
4. Biochemistry
5. Community Medicine
6. Dermatology, Venereology and Leprosy
7. Forensic Medicine
8. General Medicine
9. Microbiology
10. Pathology
11. Paediatrics
12. Pharmacology
13. Physiology
14. Psychiatry
15. Radio-diagnosis
16. Radio-therapy
17. Tuberculosis & Respiratory Medicine

and such other subjects as might have been introduced by the Universities in Karnataka prior to commencement of Health University i.e., 1.6.1996, or recognised by Medical Council of India.

B. M.S. (Master of Surgery)

1. General Surgery
2. Obstetrics and Gynecology
3. Ophthalmology
4. Orthopedics
5. Oto-Rhino-Laryngology

and such other subjects as might have been introduced by the Universities in Karnataka prior to commencement of Health University i.e., 1.6.1996, or recognised by Medical Council of India.

C. D.M. (Doctor of Medicine)

1. Cardiology and such subjects recognised by Medical Council of India.

D. M.Ch (Master of Chirurgie)

In the subjects recognised by Medical Council of India.

1.2 Postgraduate Diploma Courses

Post graduate diploma course may be pursued in the following subjects:

Child Health (D.C.H.), Obstetrics and Gynaecology (D.G.O.), Otorhinolaryngology (D.L.O.), Ophthalmology (D.O.), Orthopaedics (D.Ortho), Anaesthesiology (D.A.), Clinical Pathology (D.C.P.), Microbiology (D. Micro), Public Health (D.P.H), Forensic Medicine (D.F.M.), Dermatology, Venerology and Leprosy (D.D.V.L.), Psychiatry (D.P.M.), Radio-Diagnosis (DMRD), Radio-therapy (DMRT), Tuberculosis and Chest Diseases (D.T.C.D.) and such other subjects as might have been introduced by the Universities in Karnataka prior to commencement of Health University i.e., 1-6-1996, and recognised by Medical Council of India.

2. Eligibility for Admission

2.1 MD / MS Degree and Diploma Courses: A candidate affiliated to this university and who has passed final year M.B.B.S. examination after pursuing a study in a medical college recognised by the Medical Council of India, from a recognised Medical College affiliated to any other University recognised as equivalent thereto, and has completed one year compulsory rotating internship in a teaching Institution or other Institution recognised by the Medical Council of India, and has obtained permanent registration of any State Medical Council shall be eligible for admission.

2.2 D.M and M.Ch Courses:

D.M.: Candidate seeking admission for D.M courses in any subject must possess recognised degree of MD (or its equivalent recognised degree) in the subject specified in the regulations of the Medical Council of India from time to time.

M.Ch : Candidate seeking admission for M.Ch course in any subject must possess recognised degree of MS (or its equivalent recognised degree) in the subject specified in the regulations of the Medical Council of India from time to time.

3. Obtaining Eligibility Certificate by the University before making Admission

No candidate shall be admitted for any postgraduate degree/diploma course unless the candidate has obtained and produced the eligibility certificate issued by the University. The candidate has to make an application to the University with the following documents along with the prescribed fee :

1. MBBS pass / degree certificate issued by the University.
2. Marks cards of all the university examinations passed MBBS course.
3. Attempt Certificate issued by the Principal.
4. Certificate regarding the recognition of the medical college by the Medical Council of India.
5. Completion of internship certificate.
6. In case internship was done in a non-teaching hospital, a certificate from the Medical Council of India that the hospital has been recognised for internship.

7. Registration by any State Medical Council and
8. Proof of SC/ ST or Category I, as the case may be.

Candidates should obtain the Eligibility Certificate before the last date for admission as notified by the University.

A candidate who has been admitted to postgraduate course should register his / her name in the University within a month of admission after paying the registration fee.

4. Intake of Students

The intake of students to each course shall be in accordance with the ordinance in this behalf.

5. Duration of Study

a) M.D /M.S Degree Courses

The course of study shall be for a period of 3 years consisting of 6 terms.

b) D.M /M.Ch

The courses of study shall be for a period of 3 years consisting of 6 terms.

c) Diploma courses:

The course of study shall be for a period of 2 years consisting of 4 terms.

5.2 Requirement to complete the course -- **deleted ***

6. Method of training

The training of postgraduate for degree/diploma shall be residency pattern with graded responsibilities in the management and treatment of patients entrusted to his/her care. The participation of the students in all facets of educational process is essential. Every candidate should take part in seminars, group discussions, grand rounds, case demonstration, clinics, journal review meetings, CPC and clinical meetings. Every candidate should be required to participate in the teaching and training programme of undergraduate students. Training should include involvement in laboratory and experimental work, and research studies. Basic medical sciences students should be posted to allied and relevant clinical departments or institutions. Similarly, clinical subjects' students should be posted to basic medical sciences and allied speciality departments or institutions.

7. Attendance, Progress and Conduct

7.1 A candidate pursuing degree/diploma course should work in the concerned department of the institution for the full period as a full time student. No candidate is permitted to run a clinic/laboratory/nursing home while studying postgraduate course.

7.2 Each year shall be taken as a unit for the purpose of calculating attendance.

7.3 Every student shall attend symposia, seminars, conferences, journal review meetings, grand rounds, CPC, case presentation, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons.

* deleted vide university notification No. UA/ORD-6/1999-2000 dated 9.4.2001

7.4 Every candidate is required to attend a minimum of 80% of the training during each academic year of the post graduate course. Provided further, leave of any kind shall not be counted as part of academic term without prejudice to minimum 80% attendance of training period every year.

7.5 Any student who fails to complete the course in the manner stated above shall not be permitted to appear for the University Examinations.

8. Monitoring Progress of Studies:

8. Monitoring Progress of Studies:

8.1 Work diary / Log Book - Every candidate shall maintain a work diary and record of his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. (please see Chapter IV for model checklists and logbook specimen copy). Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate. The work diary shall be scrutinised and certified by the Head of the Department and Head of the Institution, and presented in the university practical/clinical examination.

8.2 Periodic tests:

In case of degree courses of three years duration (MD/MS, DM, MCh.), the concerned departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce. Records and marks obtained in such tests will be maintained by the Head of the Department and sent to the University, when called for.

In case of diploma courses of two years duration, the concerned departments may conduct two tests, one of them be at the end of first year and the other in the second year three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce.

8.3 Records: Records and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University or MCI.

9. Dissertation

9.1 Every candidate pursuing MD/MS degree course is required to carry out work on a selected research project under the guidance of a recognised post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.

9.2 The dissertation is aimed to train a post graduate student 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, comparison of results and drawing conclusions.

9.3 Every candidate shall submit to the Registrar (Academic) of the University in the prescribed proforma, a synopsis containing particulars of proposed dissertation work within six months from the date of commencement of the course on or before the dates notified by the University. The synopsis shall be sent through the proper channel.

9.4 Such synopsis will be reviewed and the dissertation topic will be registered by the University. No change in the dissertation topic or guide shall be made without prior approval of the University.

9.5 The dissertation should be written under the following headings:

- i. Introduction
- ii. Aims or Objectives of study
- iii. Review of Literature
- iv. Material and Methods
- v. Results
- vi. Discussion
- vii. Conclusion
- viii. Summary
- ix. References
- x. Tables
- xi. Annexures

9.6 The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and other annexures. It should be neatly typed in double line spacing on one side of paper (A4 size, 8.27" x 11.69") and bound properly. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the Institution.

9.7 Four copies of dissertation thus prepared shall be submitted to the Registrar (Evaluation), six months before final examination on or before the dates notified by the University.

9.8 The dissertation shall be valued by examiners appointed by the University. Approval of dissertation work is an essential precondition for a candidate to appear in the University examination.

9.9 **Guide:** The academic qualification and teaching experience required for recognition by this University as a guide for dissertation work is as per Medical Council of India Minimum Qualifications for Teachers in Medical Institutions Regulations, 1998. Teachers in a medical college/institution having a total of eight years teaching experience out of which at least five years teaching experience as Lecturer or Assistant Professor gained after obtaining post graduate degree shall be recognised as post graduate teachers.

A **Co-guide** may be included provided the work requires substantial contribution from a sister department or from another medical institution recognised for teaching/training by Rajiv Gandhi University of Health Sciences/Medical Council of India. The co-guide shall be a recognised post graduate teacher of Rajiv Gandhi University of Health Sciences.

9.10 **Change of guide:** In the event of a registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from the university.

10. Schedule of Examination

The examination for M.D / M.S courses shall be held at the end of three academic years (six academic terms). The examination for D.M and M.Ch courses shall be held at the end of three years. The examination for the diploma courses shall be held at the end of two academic years (four academic terms). The university shall conduct two examinations in a year at an interval of four to six months between the two examination. Not more than two examinations shall be conducted in an academic year.

11. Scheme of Examination

11.1 M.D. / M.S. Degree

M.D. / M.S. Degree examinations in any subject shall consist of dissertation, written paper (Theory), Practical/Clinical and Viva voce.

11.1.1 Dissertation: Every candidate shall carryout work and submit a dissertation as indicated in SI.NO.9. Acceptance of dissertation shall be a precondition for the candidate to appear for the final examination.

11.1.2 Written Examination (Theory): A written examination shall consist of **four** question papers, each of **three** hours duration. Each paper shall carry 100 marks. Out of the **four** papers, the 1st paper in clinical subjects will be on applied aspects of basic medical sciences. Recent advances may be asked in any or all the papers.

11.1.3 Practical / Clinical Examination:

In case of practical examination, it should be aimed at assessing competence and skills of techniques and procedures as well as testing students ability to make relevant and valid observations, interpretations and inference of laboratory or experimental work relating to his/her subject.

In case of clinical examination, it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and **two** short cases.

The total marks for practical / clinical examination shall be 200.

11.1.4 Viva Voce: Viva Voce Examination shall aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills. The total marks shall be 100 and the distribution of marks shall be as under:

- | | |
|---|----------|
| (i) For examination of all components of syllabus | 80 Marks |
| (ii) For Pedagogy | 20 Marks |

11.1.5 Examiners: There shall be at least four examiners in each subject. Out of them two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

11.1.6 Criteria for declaring as pass in University 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.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Registrar (Evaluation).

11.1.7 Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate marks is 75 percent and above. Distinction will not be awarded for candidates passing the examination in more than one attempt.

11.2 D.M / M.Ch:

The examination shall consist of theory, clinical/practical and viva voce examination.

11.2.1 (Theory) (Written Examination): The theory examination shall consist of **four** question papers, each of **three** hours duration. Each paper shall carry 100 marks. Out of the **four** papers, the first paper will be on basic medical sciences. Recent advances may be asked in any or all the papers.

11.2.2 Practical / Clinical Examination:

In case of practical examination it should be aimed at assessing competence, skills of techniques and procedures as well as testing students ability to make relevant and valid observations, interpretation and experimental work relevant to his / her subject.

In case of clinical examination it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and two short cases.

The maximum marks for Practical / Clinical shall be 200.

11.2.3 Viva Voce: Viva Voce examination shall aim at assessing thoroughly depth of knowledge, logical reasoning, confidence and oral communication skills. The maximum marks shall be 100.

11.2.4 Examiners: There shall be at least four examiners in each subject. Out of them, two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

11.2.5 Criteria for declaring as pass in University 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.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Registrar (Evaluation).

11.3 Diploma Examination:

Diploma examination in any subject shall consist of theory (written papers), Practical / Clinical and Viva - Voce.

11.3.1 Theory: There shall be **three** written question papers each carrying 100 marks. Each paper will be of **three** hours duration. In clinical subjects one paper out of this shall be on basic medical sciences. In basic medical subjects and para clinical subjects, questions on applied clinical aspects should also be asked.

11.3.2 Practical / Clinical Examination:

In case of practical examination it should be aimed at assessing competence, skills related to laboratory procedures as well as testing students ability to make relevant and valid observations, interpretation of laboratory or experimental work relevant to his/her subject.

In case of clinical examination, it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine atleast one long case and two short cases.

The maximum marks for practical / Clinical shall be 150.

11.3.3 Viva Voce Examination: Viva Voce examination should aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills. The total marks shall be 50.

11.3.4 Criteria for Pass: Criteria for declaring as pass in University 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.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Registrar (Evaluation).

11.3.5 Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate marks is 75 percent and above. Distinction will not be awarded for candidates passing the examination in more than one attempt.

11.3.6 Examiners: There shall be at least four examiners in each subject. Out of them, two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

12. Number of Candidates per day. The maximum number of candidates for practical/clinical and viva-voce examination shall be as under:

MD / MS Course: Maximum of 6 per day

Diploma Course: Maximum of 8 per day

DM / M.Ch Course: Maximum of 3 per day

CHAPTER II

GOALS AND GENERAL OBJECTIVES OF POSTGRADUATE MEDICAL EDUCATION PROGRAM

GOAL

The goal of postgraduate medical education shall be to produce competent specialist and /or Medical teacher:

- (i) who shall recognise the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy;
- (ii) who shall have mastered most of the competencies, pertaining to the specialty, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system;
- (iii) who shall be aware of the contemporary advances and developments in the discipline concerned;
- (iv) who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology; and
- (v) who shall have acquired the basic skills in teaching of the medical and paramedical professionals.

GENERAL OBJECTIVES

At the end of the postgraduate training in the discipline concerned the student shall be able to:

- i) Recognise the importance of the concerned speciality in the context of the health need of the community and the national priorities in the health sector.
- ii) Practice the speciality concerned ethically and in step with the principles of primary health care.
- iii) Demonstrate sufficient understanding of the basic sciences relevant to the concerned speciality.
- iv) Identify social, economic, environmental, biological and emotional determinants of health in a given case, and take them into account while planning therapeutic, rehabilitative, preventive and promotive measures/strategies.
- v) Diagnose and manage majority of the conditions in the speciality concerned on the basis of clinical assessment, and appropriately selected and conducted investigations.
- vi) Plan and advise measures for the prevention and rehabilitation of patients suffering from disease and disability related to the speciality.
- vii) Demonstrate skills in documentation of individual case details as well as morbidity and mortality data relevant to the assigned situation.

- viii) Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behaviour in accordance with the societal norms and expectations.
- ix) Play the assigned role in the implementation of national health programmes, effectively and responsibly.
- x) Organise and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field situation.
- xi) Develop skills as a self-directed learner, recognise continuing educational needs; select and use appropriate learning resources.
- xii) Demonstrate competence in basic concepts of research methodology and epidemiology, and be able to critically analyse relevant published research literature.
- xiii) Develop skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and paramedical health workers.
- xiv) Function as an effective leader of a health team engaged in health care, research or training.

STATEMENT OF THE COMPETENCIES

Keeping in view the general objectives of postgraduate training, each discipline shall aim at development of specific competencies, which shall be defined and spelt out in clear terms. Each department shall produce a statement and bring it to the notice of the trainees in the beginning of the programme so that he or she can direct the efforts towards the attainment of these competencies.

COMPONENTS OF THE PG CURRICULUM

The major components of the PG curriculum shall be:

- Theoretical knowledge
- Practical/clinical Skills
- Training in Thesis.
- Attitudes, including communication.
- Training in research methodology.

Source: Medical Council of India, Regulations on postgraduate medical education, 1997.

Chapter III

Course Description

Post Graduate Courses in Obstetrics & Gynaecology

M.S. Obstetrics & Gynaecology

Goal

The goals of postgraduate training course would be to train a MBBS doctor who will:

- Practice efficiently and effectively, backed by scientific knowledge and skill base.
- Exercise empathy and a caring attitude and maintain high ethical standards.
- Continue to evince keen interest in continuing education in the speciality irrespective of whether he is in a teaching institution or is a practicing specialist.
- Be a motivated 'teacher' – defined as a specialist keen to share his knowledge and skills with a colleague or a junior or any learner.

Objectives

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

- i. Offer to the community, the current quality of 'Standard care' in obstetrics & Gynaecological diagnosis' as well as therapeutics. Medical or surgical, for common as well as referred conditions.
- ii. Periodically self assess his or her performance and keep abreast with ongoing advances in the field & apply the same in his / her practice.
- iii. Be aware of his or her own limitations to the application of the speciality in situations which warrant referral to major centers or individuals more qualified to treat.
- iv. Apply research and epidemiological methods during his/her practice. The candidate shall be able to present or publish work done by him/her.

- v. Contribute as an individual or in a group or institution towards the fulfillment of national objectives with regard to prevention of maternal mortality and morbidity and improving the neonatal outcome.
- vi. 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.
- vii. Effectively communicate with colleagues.

Course Contents

It includes topics not only of obstetrics and Gynaecology but also those aspects of Medicine, Surgery, Pediatrics, applied Anatomy Physiology, Pathology, Pharmacology and Microbiology relevant to the practice of both Obstetrics and Gynaecology. It is intended as a guide to the candidates and it is not comprehensive. As and when there is newer development it becomes eligible for inclusion. Hence the candidates should familiar themselves with the current content of the scientific journals and reviews of major topics.

Theory

Basic Sciences

Genetics

- Normal and abnormal Karyo types
- Problems of intersex
- Genetic causes of infertility and early pregnancy loss
- Genetic aspects of artificial insemination

Anatomy Including Embryology

Gametogenesis, Ovulation, fertilization, implantation, development of foetus and placenta. Development of male and female genital tract. Problems of abnormal development of genital tract in Obstetrics and Gynaecology. Anatomy of Urogenital system, including pelvic musculature. Blood supply, innervation and Lymphatic drainage of the pelvis and reproductive organs.

Pathology

Pathology of inflammatory disease, degenerative and neoplastic disease of vulva vagina, cervix and uterus, fallopian tubes, Ovaries and broad ligament.

Haematology

Blood groups, Rh factor, incompatibility, Blood transfusion.

Biochemistry

Steroid and prostaglandin synthesis and metabolism in mother and foetus. Maternal and foetal carbohydrate, lipid, amino-acid metabolism and iron metabolism. Synthesis and secretion of foetal pulmonary surfactant.

Endocrinology

Structure, synthesis, function, metabolism and principles of assay of hormones, produced from hypothalamus, Anterior and posterior pituitary, Thyroid, Pancreas, Adrenal cortex, adrenal medulla, Ovary, Testis, and placenta.

Pharmacology

Placental transfer of drugs and its effects on mother and foetus, Eg: Antibiotics, anti hypertensives, Psychotropic drugs, Oral contraceptives, Chemotherapeutic drugs, Anticonvulsants, Anti coagulants and Oxytocic drugs, effects of tobacco and alcohol on pregnant mother and foetus. Teratogenic effect of drugs taken during lactational period.

Immunology

Basic immunology including primary and secondary immune response, mechanism of antibody production. HLA system and graft rejection. Change in pregnancy and the foetus as a graft. Immunological pregnancy tests. Rhesus and other Isoimmunisation. Active and passive immunisation and Auto immune disease.

Microbiology

Epidemiology and pathophysiology of disease developing in pregnancy that is Septic abortion, Preterm labour, PROM, Puerperal sepsis, Mastitis, Septic shock and Neonatal sepsis. Microbiology of TORCH infection, Syphilis, Chlamydia, Mycoplasma, hepatitis and HIV.

Maternal physiological changes during pregnancy

- i) Fluid and electrolyte balance.
- ii) Changes in respiratory, Cardio vascular system.
- iii) Changes in Gastro-intestinal system – including liver and pancreas
- iv) Change in urinary system
- v) Hematological changes including coagulation mechanism and fibrinolytic system

Teratology

Mechanisms of teratogenesis. Effect of possible teratogens – drugs virus radiation and other agents.

Antenatal care

Includes diagnosis, of pregnancy, Identification of high risk group of mothers and foetus with different modality of investigation. Clinical monitoring of maternal/foetal welfare and selection of place of delivery.

Physiology of Labour

Causation of onsets of labour

Intrapartum care

Maternal and foetal monitoring

Mechanism and management of normal labour

Abnormal pregnancy

- i. Medical diseases and disorders complicating pregnancy and child birth
- ii. Obsteric complications of pregnancy
- iii. Multiple pregnancy
- iv. Congenital malformations
- v. Foetal growth retardation
- vi. Repeated pregnancy loss
- vii. Preterm labour
- viii. Prolonged pregnancy
- ix. Malpresentations
- x. Shock and collapse
- xi. Ectopic pregnancy
- xii. Rh incompatibility.

Abnormalities of Labour and Delivery

Includes induction of labour and abnormal uterine action

Social Obstetrics

Study of interplay of social and environmental factors and human reproduction going back to premarital a preconception period.

- i. Implementing safe motherhood initiative.
- ii. Community maternal health care
- iii. Antenatal checkup
- iv. MCH problems
- v. Risk approach of pregnant women
Anaemia, STD syphilis, tetanus, AIDS.
- vi. Domicilliary care
- vii. Postnatal complications
- viii. Low birth weight (L.B.W.)
- ix. Socio economic status and birth weight correction
- x. Infant feeding
- xi. Road to health chart and school health programme.
- xii. Pre pregnancy and post pregnancy counseling
- xiii. Reproductive and child health (RCH)
- xiv. National Health Programmes

Family welfare programmes including Reconstructive surgeries

Temporary methods like

- Chemical contraceptives
- Barrier methods
- Hormonal contraception
- IUD

Permanent methods like

- Tubectomy
- Laparoscopy tubal ligation
- Minilap

Reconstructive surgeries like

- Tuboplasty
- Vaso Vasotomy

Perinatology

- i. The term new born infant
- ii. Low birth weight baby, - Preterm, - IUGR
- iii. Asphyxia neonatorum
- iv. Respiratory distress
- v. Jaundice in new born
- vi. Haemorrhagic disease of new born
- vii. Convulsions in new born
- viii. Injuries of the new born
- ix. Infection of new born
- x. Diarrhea in new born
- xi. Vomiting of the new born
- xii. Congenital malformation of new born.

Neonatal

Early neonatal complication, infection and management.

Mortality and Morbidity

Epidemiology, Magnitude of the problem, causes, prevention and management of Maternal mortality and morbidity. Perinatal mortality,

Gynaecology

History taking with special reference to Gynaecological history, abdominal and pelvic examination, relevant investigation to arrive at most probable diagnosis.

Topics includes: Infection, Newgrowths (both benign and malignant) and other pathological disorders of vulva, vagina, urinary bladder, cervix, uterus, fallopian tubes, Ovaries and Pelvic cellular tissues including STD and HIV.

Adolescent Gynaecology

Menstrual disorders, including amenorrhoea, menopause, postmenopausal Gynaecological problems and management of the aged and elderly women.

Chromosomal disorders – including intersex

Gynaecologic clinical cytopathology.

Contraception and family planning.
Infertility and ART
Hormones therapy.
Problem of sex and marriage

Clinical Obstetrics & Gynaecology

Obstetrics

- i. Diagnosis of early pregnancy and its complication and management.
- ii. AIM of ANC and management of high risk pregnancies.
- iii. To work in labour wards and to manage normal and complicated deliveries.
- iv. Neonatal care and resuscitation in labour wards
- v. Follow-up of normal and abnormal deliveries during postnatal period
- vi. Assisting caesarean section initially, by the end of the course, they shall be able to do caesarean sections independently.
- vii. I C U Management.
- viii. Family welfare programmes and reconstructive surgeries of the fallopian tubes.
- ix. Rural obstetrics care and referral services.

Gynaecology

- i. To work in O.P.D. and examine Gynaecology cases routinely,
- ii. Minor operations: To assist in the beginning and carry out work independently by the end of I year
- iii. Major Operations: To assist as second assistant for the I six months and as first assistant for the next 6 months and do major operations like vaginal hysterectomy with P.F.R. and abdominal hysterectomy, Ovariectomy with the assistance of senior doctors. By the end the course the candidate shall be familiar with the techniques of above mentioned operations and to do independently.
- iv. To do investigations like HSG and USG under guidance initially and independently by the end of course.
- v. To assist medico legal cases.
- vi. Writing case records
- vii. Candidate should write separate PG case sheets, They should keep diary and log book and get verified by the Unit Chief by the end of each month.

Essential Research Skills

- i. Basic statistical knowledge.
 - a. Ability to undertake clinical & basic research
 - b. Descriptive and inferential statistics
 - c. Ability to publish results of one's work.
- ii. This could be achieved during the course by attending workshops on research methodology, basic statistics classes and regularly having journal clubs etc., where selected articles are taken and evaluated for content quality and presentation.

Communication abilities

Ability to interact with and work as a team with other colleagues, with patients and with teachers.

Record keeping

The ability to maintain records as scientifically as possible. Knowledge of computer is helpful.

Surgical Skills

1. Conducting minimum 25 cases of normal delivery including forceps & ventose application.
Episiotomy repair, colposyntesis 3rd degree perineal tear suturing

2. Tubectomy both mini lap & laparoscopic sterilisation.

3. Destructive operations (25 cases)

Minor O.T. procedures:

- i. MTP, D&C, suction evacuation, M.R. Mid-Trimester procedures extraamniotic instillation with of 2%ethacardine inj, Local application cerviprime gel insertion of intrauterine devisors.
- ii. Cervical and Endometrial biopsy, electric couterisation and cold cautery tube testing procedure and histosalphingogram,
- iii. Cervical biopsy, pap-smear,
- iv. Diagnostic laparoscopy & colposyntosis

Major O.T. Procedures

- i. Caesarean section minimum 10 to be done and 20 operations to be assisted
- ii. Vaginal hysterectomy minimum 20 to be assisted and 5 to be performed
- iii. Abdominal hysterectomy minimum 20 to be assisted and 5 to be performed
- iv. Ovariectomy
- v. Cervical encercelage
- vi. Caesarian hysterectomy
- vii. Salpingectomy for ectopic pregnancy
- viii. Laparotomy
- ix. Internal iliac ligation
- x. Internal pelvic version and MRP
- xi. Operation for inversion of uterus

4. **Special Operations (Only to assist)**

- i. Tuboplasty
- ii. Myomectomy
- iii. Ovarian de-bulking operation
- iv. Ventrofixation (Gilliam's operation)
- v. Sling operations for prolapse
- vi. Wartheim's hysterectomy
- vii. Simple and radical vulvectomy
- viii. Operation for stress incontinence

Year wise Structured Training Schedule

I year

Theoretical knowledge, Basic sciences

- i. Examination and diagnosis of Obstetrics & Gynaecological cases with relevant investigations case recording.
- ii. **Surgical Skills**
Assisting Caesarian sections as second assistant initially and later on as first assistant, with supervision.
Assisting all major gynaecological operations like, vaginal & abdominal hysterectomies as a second assistant.

Minor Operations

Assisting minor operations like M.T.P., Tubectomy, Laprascopy, Cervical biopsy, D & C in the initial period, and later on doing independently under supervision.

II Year

Theoretical knowledge of Allied subjects

Clinical examination and diagnosis: The student is encouraged to take diagnostic, investigational and therapeutic decisions.

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, M.T.P. cervical biopsy, D & C, tubectomies, outlet forceps, emergencies during delivery. The student must know how to manage the complications during and after delivery confidently.

Conference and workshops: Encouraged to attend one conference of State level and at National level. Presentation of paper in the conference should be encouraged.

The student should be involved actively in presentation of seminars, panel discussion, Journal clubs and case discussions with seniors, and to maintain record in Log book.

IIIrd Year

Should be through with basic, allied and recent advances.

Clinical Diagnosis & Examination: Should be able to make clinical diagnosis and be familiar with techniques of operations like caesarean sections, abdominal and vaginal hysterectomies, reconstructive surgeries of fallopian tubes and surgeries on ovarian tumours. Techniques of assisted reproductive technologies.

Teaching activities: Final year student should take lead in conducting seminars, panel discussions, Journal Clubs and case discussions with I & II year students. The student should involve himself/herself in teaching undergraduate students specially bedside clinics.

The student should attend National and State level conferences, C.M.E. Programmes and workshops on colposcopy, Hystererscopy and endoscopic surgeries, including ultrasound guided procedures. The student must also be exposed to the Assisted reproductive technologies like, I.V.F-E-T. ICSI, and also to observe radical surgeries in Gynaec-Oncology.

Rotation and Labour ward Postings

- i. The student must work in labour wards atleast 6 months during II & III year. (3 months each year)
- ii. Pediatrics : 1 month

- iii. Radio-diagnosis including Ultrasound and NST: 1 month
- iv. Radiotherapy (oncology): 1 month
- v. Anesthesia: 1 month

Teaching/Learning Experience

Teaching and Learning Activities

A candidate pursuing the course should work in the institution as a full time student. No candidate should be permitted to run a clinic/laboratory/nursing home while studying postgraduate course. Each year should be taken as a unit for the purpose of calculating attendance.

Every student shall attend teaching and learning activities during each year as prescribed by the department and not absent himself / herself from work without valid reasons.

A list of teaching and learning activities designed to facilitate students acquire essential knowledge and skills outlined is given below:

1. Lectures : Lectures are to be kept to a minimum. They may, however, be employed for teaching certain topics. Lectures may be didactic or integrated.
 - a) Didactic Lectures: Recommended for selected common topics for post graduate students of all specialties. Few topics are suggested as examples:
 - 1) Bio-statistics
 - 2) Use of library,
 - 3) Research Methods
 - 4) Medical code of Conduct and Medical Ethics
 - 5) National Health and Disease Control Programmes
 - 6) Communication Skills etc.These topics may preferably taken up in the first few weeks of the 1st year.
 - b) Integrated Lectures: These are recommended to be taken by multidisciplinary teams for selected topics, eg. Jaundice, Diabetes mellitus, Thyroid etc.
2. Journal Club : Recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the Log Book relevant details. Further, every candidate must make a presentation from the allotted journal(s), selected articles at least four times a year and a total of 12 seminar presentations in three years. The presentations would be evaluated using check lists and would carry weightage for internal assessment (See Checklist in Chapter IV). A time table with names of the student and the moderator should be announced at the beginning of every year.
3. Subject Seminar: Recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the Log Book relevant details. Further, every candidate must present on selected topics at least four times a year and a total of 12 seminar presentations in three years. The presentations would be evaluated using check lists and would

carry weightage for internal assessment (See Checklist in Chapter IV). A timetable for the subject with names of the student and the moderator should be scheduled at the beginning of every year.

4. Student Symposium: Recommended as an optional multi disciplinary programme. The evaluation may be similar to that described for subject seminar.
5. Attending OPD work
6. Ward Rounds: Ward rounds may be service or teaching rounds.
 - a) Service Rounds: Postgraduate students and Interns should do every day for the care of the patients. Newly admitted patients should be worked up by the PGs and presented to the seniors the following day.
 - b) Teaching Rounds : Every unit should have 'grand rounds' for teaching purpose. A diary should be maintained for day to day activities by the students. Entries of (a) and (b) should be made in the Log book.
7. Clinico-Pathological Conference: Recommended once a month for all post graduate students. Presentation be done by rotation. If cases are not available due to lack of clinical postmortems, it could be supplemented by published CPCs.
8. Inter Departmental Meetings: Strongly recommended particularly with departments of Pathology and Radio-Diagnosis at least once a week. These meetings should be attended by post graduate students and relevant entries must be made in the Log Book.

Pathology: A dozen interesting cases may be chosen and presented by the post graduate students and discussed by them as well as the senior staff of Surgery department. The staff of Pathology department would then show the slides and present final diagnosis. In these sessions the advance immuno-histo-chemical techniques, the burgeoning markers other recent developments can be discussed.

Radio-diagnosis: Interesting cases and the imaging modalities should be discussed.

8. Teaching Skills: : Post graduate students must teach under graduate students (Eg. medical, nursing) by taking demonstrations, bed side clinics, tutorials, lectures etc. Assessment is made using a checklist by surgery faculty as well students. (See model check list in Chapter IV). Record of their participation be kept in Log book. Training of post graduate students in Educational Science and Technology is recommended.
9. Continuing Medical Education Programmes (CME) : Recommended that at least 2 state level CME programmes should be attended by each student in 3 years.
10. Conferences: Attending conferences is optional. However it is encouraged.

The unit heads should scrutinize it every week end. IIOD., should see and sign at the end of each unit posting.

- i. P.G. posted to each unit should write the case history examine the patients in detail and carry out the investigations and shall be responsible for pre operative, operative and post operative care. By the end of the unit posting, shall submit the same to the unit chief and take the signature

- ii. 1. Clinical cases: Each M.S. student should present atleast 20 clinical cases for discussion in the three year posting (10 Obstetrics & 10 Gynaecology)
2. Journal club: Each candidate shall present atleast 10 papers on recent advances in Obstetrics and Gynaecology from latest journals in the Journal clubs.
3. Subject Seminar: They shall participate actively in minimum of eight subject seminars.
4. They should actively undertake the undergraduate teaching programmes

C.M.E. programmes: shall attend CME programmes and shall present minimum of two papers in any of the Scientific conferences.

Dissertation

Every candidate pursuing degree course is required to carry out work on a selected research project under the guidance of a recognised post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.

The dissertation is aimed to train a post graduate student 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, comparison of results and drawing conclusions.

Every candidate shall submit to the Registrar (Academic) of RGUHS, in the prescribed proforma, a synopsis containing particulars of proposed dissertation work within six months from the data of commencement of the course on or before the dates notified by the University. The synopsis shall be sent through the proper channel.

Such synopsis will be reviewed and the dissertation topic will be registered by the University. No change in the dissertation topic or guide shall be made without prior approval of the University.

The dissertation should be written under the following headings:

- i Introduction
- ii Aims or Objectives of study
- iii Review of Literature
- iv Material and Methods
- v Results
- vi Discussion
- vii Conclusion
- viii Summary
- ix References
- x Tables
- xi Annexures

The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and other annexures. It should be neatly typed in double line spacing on one side of paper 9 (A4 size, 8.27" x 11.69") and bound properly. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the Institution.

Four copies of dissertation thus prepared shall be submitted to the Registrar (Evaluation), six months before final examination on or before the dates notified by the University.

The dissertation shall be valued by examiners appointed by the University. Approval of dissertation work is an essential precondition for a candidate to appear in the University examination.

For some more details regarding Guide etc., please see Chapter I and for books on research methodology, ethics, etc., see Chapter IV.

Monitoring Learning Progress

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only also helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on participation of students in various teaching / learning activities. It may be structured and assessment be done using checklists that assess various aspects. Checklists are given in Chapter IV.

The learning out comes to be assessed should included: (i) Personal Attitudes, (ii) Acquisition of Knowledge, (iii) Clinical and operative skills, (iv) Teaching skills and (v) Dissertation.

i) ***Personal Attitudes.*** The essential items are:

- Caring attitudes
- Initiative
- Organisational ability
- Potential to cope with stressful situations and undertake responsibility
- Trust worthiness and reliability
- To understand and communicate intelligibly with patients and others
- To behave in a manner which establishes professional relationships with patients and colleagues
- Ability to work in team
- A critical enquiring approach to the acquisition of knowledge

The methods used mainly consist of observation. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers.

ii) ***Acquisition of Knowledge*** : The methods used comprise of 'Log Book' which records participation in various teaching / learning activities by the students. The number of activities attended and the number in which presentations are made are to be recorded. The log book should periodically be validated by the supervisors. Some of the activities are listed. The list is not complete. Institutions may include additional activities, if so, desired.

Journal Review Meeting (Journal Club): The ability to do literature search, in depth study, presentation skills, and use of audio- visual aids are to be assessed. The assessment is made by faculty members and peers attending the meeting using a checklist (see Model Checklist – I, Chapter IV)

Seminars / Symposia: The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio-visual aids are to be assessed using a checklist (see Model Checklist-II, Chapter IV)

Clinico-pathological conferences : This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

Medical Audit: Periodic morbidity and mortality meeting be held. Attendance and participation in these must be insisted upon. This may not be included in assessment.

iii) **Clinical skills**

Day to Day work : Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills (see Model Checklist III, Chapter IV).

Clinical meetings : Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list (see Model checklist IV, Chapter IV).

Clinical and Procedural skills : The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the log book. (Table No.3, Chapter IV)

iv) **Teaching skills :** Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students (See Model checklist V, Chapter IV)

v) **Dissertation in the Department :** Periodic presentations are to be made in the department. Initially the topic selected is to be presented before submission to the University for registration, again before finalisation for critical evaluation and another before final submission of the completed work (See Model Checklist VI & VII, Chapter IV)

vi) *Periodic tests:* The departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce.

vii) *Work diary / Log Book-* Every candidate shall maintain a work diary and record his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.

viii) *Records:* Records, log books and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University or MCI.

Log book

The log book is a record of the important activities of the candidates during his training, Internal assessment should be based on the evaluation of the log book. Collectively, log books are a tool for the evaluation of the training programme of the institution by external agencies. The record includes academic activities as well as the presentations and procedures carried out by the candidate.

Format for the log book for the different activities is given in Tables 1,2 and 3 of Chapter IV. Copies may be made and used by the institutions.

Procedure for defaulters: Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In extreme cases of default the departmental committee may recommend that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

Scheme of Examination

A. Theory

There shall be four question papers, each of three hours duration. Each paper shall consist of two long essay questions each question carrying 20 marks and 6 short essay questions each carrying 10 marks. Total marks for each paper will be 100. Questions on recent advances may be asked in any or all the papers. Details of distribution of topics for each paper will be as follows:

Paper I:	Basic Science as applicable to Obstetrics and Gynecology
Paper II:	Obstetrics and Gynecology
Paper III:	Gynecology
Paper IV:	Social Obstetrics and Family Welfare Planning

Note: The distribution of chapters / topics shown against the papers are suggestive only.

B. Clinical 200 marks

There shall be two long cases and two short cases to be examined and presented by each candidate. Marks shall be 200.

Type of cases

Long cases: One case of Obstetrics and one case of Gynecology. Each case carries 75 marks.

Short cases: One case of Obstetrics and one case of Gynecology. Each case carries 25 marks.

C. Viva Voce: 100 Marks

1) Viva-Voce Examination: (80 Marks)

All examiners will conduct viva-voce conjointly on candidate's comprehension, analytical approach, expression and interpretation of data. It includes all components of course contents. In addition candidates may be also be given case reports, charts, dummies (pelvis, foetal skull), gross specimens, pathology slides, instruments, X- rays, ultrasound, CT scan images, NST etc., for interpretation. It includes discussion on dissertation also.

2) Pedagogy Exercise: (20 Marks)

A topic be given to each candidate in the beginning of clinical examination. He/she is asked to make a presentation on the topic for 8-10 minutes.

D.

Maximum marks for	Theory	Practical	Viva	Grand Total
M.S. Obstetrics & Gynecology	400	200	100	700

a) Recommended Books

Sl. No.	Name of the Author	Name of the Book	Edition	Name of the Publications
1.	IAN Donald	'Practical Obstetrics problems'	5 th Edn.	B.A.Publication
2.	Farnandes Aris	'Practical guide to high risk pregnancy & delivery'		Mosbi Publications
3.	William's	'Text book of Obstetrics'	21 st Edn.	(not known)
4.	Holland	'Manual of Obstetrics'		B.I.P. Publications
5.	nJeffcoat's	'Principles of Gynaecology'	5 th Edn.	Butterworth Heighmen
6.	Shaw's	Text book of Gynaecology'	12 th Edn.	B.L. Churchill Livingston.
7.	Dutta	'Text book of Gynaecology'	2 nd Edn.	Central Publications.
8.	Parulekar	'Practical Gynaecology & Obstetrics'	Latest Edn.	Vora Publications
9.	Munrokar's	'Operative Obstetrics'	10 th Edn.	A.T.B.S. Publi.
10.	Telend's	'Operative Gynaecology'	8 th Edn.	Lipincorttriven Publications
11.	Barus or celil and Burrows	'Medical disorders in Obstetrics practice'	3 rd Edn.	Blackwell science Publications
12.	Rathnam	'Obstetrics and Gynaecology'	2 nd Edn.	Orient Longmen Publications
13.	Arul kumar	'The management of labour	1 st Edn.	Orientlongmen Publications
14.	Bhaskar Rao	'Clinical Gynaecology'	4 th Edn.	Orient Longmen Publications
15.	C.S. Dawn	'Text books of Obstetrics and Neunatology'	13 th Edn.	B.B. Publications
16.	C.S. Dawn	'Text books of Gynaecology and contraception'	13 th Edn.	B.B. Publications
17.	J. Studd	'Progress in Obstetrics and Gynaecology	Latest Edn.	I.S.E. Publications

18.	Padubidri	‘Text book of Obstetrics’	1 st Edn.	C.B.S. Publications
19.	Novak’s	‘Gynaecology’	12 th Edn.	Williams and Willkins Publications
20.	Dewhurst	‘Obstetrics and Gynaecology’	5 th Edn.	Blackwell Science
21.	Speroff	‘Clinical Gynaecologic Endocrinology and infertility’	6 th Edn.	Lippincot Publications
22.	Boney’s	‘Gynaecological surgery’	9 th Edn.	A.I.T.B.S. Publications
23.	Callen	‘Ultrasonography’		C.B.S. Publications
24.	Desai	‘Infertility and sonography’		J.P. Publications
25.	R. Rajan	‘Reproductive endocrinology’		J.P. Publications
26.	Williams	‘Endocrinology’		W.B.S. Publications
27.	Pall-P.G.	‘Manual of operative laprascope’		Modern Publications
28.	J. Samuel	‘Clinical sonography’		J.D.P. Publications
29.	Kistner’s	‘Gynaecology-Principles and practice’	6 th Edn.	Hercoat Brey’s Asia Publications
30.	Macher and Moor	‘Essentials of Obstetrics and Gynaecology’	3 rd Edn.	W.B. Sunder’s Publications

Journals

1. Journal of FOGSI
2. Clinics of Obstetrics & Gynecology- North America
3. Fertility and Sterility
4. British Journal of Obstetrics & Gynecology
5. American Journal of Obstetrics & Gynecology
6. American association of gynecology laproscopy
7. Obstetrics & Gynecologic clinic
8. Current opinion in Obstetrics & Gynecology
9. Briggs update: Drugs in pregnancy & lactation.
10. Operative technique in gynecologic surgery

ADDITIONAL READING

1. Indian Council of Medical Research, "Ethical Guidelines for Biomedical Research on Human Subjects", I.C.M.R, New Delhi, 2000.
2. Code of Medical Ethics framed under section 33 of the Indian Medical Council Act, 1956. Medical Council of India, Kotla Road, New Delhi.
3. Francis C M, Medical Ethics, J P Publications, Bangalore, 1993.

4. Indian National Science Academy, Guidelines for care and use of animals in Scientific Research, New Delhi, 1994.
5. Internal National Committee of Medical Journal Editors, Uniform requirements for manuscripts submitted to biomedical journals, N Engl J Med 1991; 424-8
6. Kirkwood B R, Essentials of Medical Statistics , 1st Ed., Oxford: Blackwell Scientific Publications 1988.
7. Mahajan B K, Methods in Bio statistics for medical students, 5th Ed. New Delhi, Jaypee Brothers Medical Publishers, 1989.
8. Compendium of recommendations of various committees on Health and Development (1943-1975). DGHS, 1985 Central Bureau of Health Intelligence, Directorate General of Health Services, min. of Health and Family Welfare, Govt. of India, Nirman Bhawan, New Delhi. P - 335.
9. National Health Policy, Min. of Health & Family Welfare, Nirman Bhawan, New Delhi, 1983
10. Srinivasa D K etal, Medical Education Principles and Practice, 1995. National Teacher Training Centre, JIPMER, Pondicherry

Chapter IV

Monitoring Learning Progress

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iv) **Clinical skills**

Day to Day work : Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills (see Model Checklist III, Chapter IV).

Clinical meetings : Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list (see Model checklist IV, Chapter IV).

Clinical and Procedural skills : The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the log book. (Table No.3, Chapter IV)

iv) **Teaching skills** : Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students (See Model checklist V, Chapter IV)

vi) **Periodic tests**: In case of degree courses of three years duration, the concerned departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce.

In case of diploma courses of two years duration, the concerned departments may conduct two tests, one of them be at the end of first year and the other in the second year three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce.

vii) **Work diary / Log Book**- Every candidate shall maintain a work diary and record his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.

viii) **Records**: Records, log books and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University or MCI.

Log book

The log book is a record of the important activities of the candidates during his training, Internal assessment should be based on the evaluation of the log book. Collectively, log books are a tool for the evaluation of the training programme of the institution by external agencies. The record includes academic activities as well as the presentations and procedures carried out by the candidate.

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Procedure for defaulters: Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In extreme cases of default the departmental committee may recommend that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

CHAPTER IV (Contd.)

Format of Model Check Lists

Check List -I. MODEL CHECK-LIST FOR EVALUATION OF JOURNAL REVIEW PRESENTATIONS

Name of the Student:

Name of the Faculty/Observer:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Article chosen was					
2.	Extent of understanding of scope & objectives of the paper by the candidate					
3.	Whether cross references have been consulted					
4.	Whether other relevant publications consulted					
5.	Ability to respond to questions on the paper / subject					
6.	Audio-Visual aids used					
7.	Ability to defend the paper					
8.	Clarity of presentation					
9.	Any other observation					
	Total Score					

Check List - II. MODEL CHECK-LIST FOR EVALUATION OF SEMINAR PRESENTATIONS

Name of the Student:

Name of the Faculty/Observer:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Whether other relevant publications consulted					
2.	Whether cross references have been consulted					
3.	Completeness of Preparation					
4.	Clarity of Presentation					
5.	Understanding of subject					
6.	Ability to answer questions					
7.	Time scheduling					
8.	Appropriate use of Audio-Visual aids					
9.	Overall Performance					
10.	Any other observation					
	Total Score					

Check List - III

MODEL CHECK LIST FOR EVALUATION OF CLINICAL WORK IN WARD / OPD

(To be completed once a month by respective Unit Heads including posting in other departments)

Name of the Student:

Name of the Unit Head:

Date:

Sl. No.	Points to be considered:	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Regularity of attendance					
2.	Punctuality					
3.	Interaction with colleagues and supportive staff					
4.	Maintenance of case records					
5.	Presentation of cases during rounds					
6.	Investigations work up					
7.	Bedside manners					
8.	Rapport with patients					
9.	Counseling patient's relatives for blood donation or Postmortem and Case follow up.					
10.	Over all quality of Ward work					
	Total Score					

Check List - IV**EVALUATION FORM FOR CLINICAL PRESENTATION**

Name of the Student:

Name of the Faculty:

Date:

Sl. No.	Points to be considered	Poor 0	Below Average 1	Average 2	Above Average 3	Very Good 4
1.	Completeness of history					
2.	Whether all relevant points elicited					
3.	Clarity of Presentation					
4.	Logical order					
5.	Mentioned all positive and negative points of importance					
6.	Accuracy of general physical examination					
7.	Whether all physical signs elicited correctly					
8.	Whether any major signs missed or misinterpreted					
9.	Diagnosis: Whether it follows logically from history and findings					
10.	Investigations required					
	▪ Complete list					
	▪ Relevant order					
	▪ Interpretation of investigations					
11.	Ability to react to questioning Whether it follows logically from history and findings					
12.	Ability to defend diagnosis					
13.	Ability to justify differential diagnosis					
14.	Others					
	Grand Total					

Check List - V

MODEL CHECK LIST FOR EVALUATION OF TEACHING SKILL PRACTICE

Sl. No.		Strong Point	Weak Point
1.	Communication of the purpose of the talk		
2.	Evokes audience interest in the subject		
3.	The introduction		
4.	The sequence of ideas		
5.	The use of practical examples and/or illustrations		
6.	Speaking style (enjoyable, monotonous, etc., specify)		
7.	Attempts audience participation		
8.	Summary of the main points at the end		
9.	Asks questions		
10.	Answers questions asked by the audience		
11.	Rapport of speaker with his audience		
12.	Effectiveness of the talk		
13.	Uses AV aids appropriately		

Check list VI

MODEL CHECK LIST FOR DISSERTATION PRESENTATION

Name:

Faculty/observer:

Date:

Sl. No.	Points to be considered	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Interest shown in selecting a topic					
2.	Appropriate review of literature					
3.	Discussion with guide & other faculty					
4.	Quality of protocol					
5.	Preparation of proforma					

Checklist-VII

CONTINUOUS EVALUATION OF DISSERTATION WORK BY GUIDE / CO-GUIDE

Name of the Student:

Name of the Faculty/Observer:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Periodic consultation with guide/co-guide					
2.	Regular collection of case material					
3.	Depth of analysis / discussion					
4.	Departmental presentation of findings					
5.	Quality of final output					
6.	Others					
	Total Score					

LOG BOOK

Table 3 : Diagnostic and Operative procedures performed

Name:

Admission Year:

College:

Date	Name	ID No.	Procedure	Category O, A, PA, PI*

- * Key:**
- O - Washed up and observed
 - A - Assisted a more senior Surgeon
 - PA - Performed procedure under the direct supervision of a senior surgeon
 - PI - performed independently

Model Overall Assessment Sheet

Name of the College:

Academic Year:

Sl. No	Faculty Member & Others	Name of Student and Mean Score									
		A	B	C	D	E	F	G	H	I	J
1											
2											
3											
4											
5											
Total Score											

Note: Use separate sheet for each year.

Chapter V

Medical Ethics Sensitisation and Practice

Introduction

There is now a shift from the traditional individual patient, doctor relationship, and medical care. With the advances in science and technology and the needs of patient, their families and the community, there is an increased concern with the health of society. There is a shift to greater accountability to the society. Doctors and health professionals are confronted with many ethical problems. It is, therefore necessary to be prepared to deal with these problems. To accomplish the Goal (i), General Objective (ii) stated in Chapter II (pages 2.1 to 2.3), and develop human values it is urged that *ethical sensitisation* be achieved by lectures or discussion on ethical issues, clinical case discussion of cases with an important ethical component and by including ethical aspects in discussion in all case presentation, bedside rounds and academic postgraduate programmes.

Course Contents

1. *Introduction to Medical Ethics*
 - What is Ethics
 - What are values and norms
 - Relationship between being ethical and human fulfillment
 - How to form a value system in one's personal and professional life
 - Heteronomous Ethics and Autonomous Ethics
 - Freedom and personal Responsibility
2. *Definition of Medical Ethics*
 - Difference between medical ethics and bio-ethics
 - Major Principles of Medical Ethics 0
 - Beneficence = fraternity
 - Justice = equality
 - Self determination (autonomy) = liberty
3. *Perspective of Medical Ethics*
 - The Hippocratic oath
 - The Declaration of Helsinki
 - The WHO Declaration of Geneva
 - International code of Medical Ethics (1993)
 - Medical Council of India Code of Ethics
4. *Ethics of the Individual*
 - The patient as a person
 - The Right to be respected
 - Truth and Confidentiality
 - The autonomy of decision
 - The concept of disease, health and healing
 - The Right to health
 - Ethics of Behaviour modification
 - The Physician – Patient relationship
 - Organ donation
5. *The Ethics of Human life*
 - What is human life

Criteria for distinguishing the human and the non-human
Reasons for respecting human life
The beginning of human life
Conception, contraception
Abortion
Prenatal sex-determination
In vitro fertilization (IVF), Artificial Insemination by Husband (AIH)
Artificial Insemination by Donor (AID),
Surrogate motherhood, Semen Intrafallopian Transfer (SIFT),
Gamete Intrafallopian Transfer (GIFT), Zygote Intrafallopian Transfer (ZIFT),
Genetic Engineering

6. *The Family and Society in Medical Ethics*

The Ethics of human sexuality
Family Planning perspectives
Prolongation of life
Advanced life directives – The Living Will
Euthanasia
Cancer and Terminal Care

7. *Profession Ethics*

Code of conduct
Contract and confidentiality
Charging of fees, Fee-splitting
Prescription of drugs
Over-investigating the patient
Low – Cost drugs, vitamins and tonics
Allocation of resources in health cares
Malpractice and Negligence

8. *Research Ethics*

Animal and experimental research / humanness
Human experimentation
Human volunteer research – Informed Consent
Drug trials

9. *Ethical workshop of cases*

Gathering all scientific factors
Gathering all human factors
Gathering all value factors
Identifying areas of value – conflict, Setting of priorities,
Working out criteria towards decisions

Recommended Reading

Francis C.M., **Medical Ethics**, 1 Ed, 1993, Jaypee Brothers, New Delhi, p 189, Rs. 60/-