



**PRAVARA INSTITUTE OF MEDICAL SCIENCES
(DEEMED TO BE UNIVERSITY)**

Loni, Tal. Rahata, Dist. Ahmednagar 413736
NAAC Re-accredited with 'A' Grade

SYLLABUS

PG Programme- MS (OBSTETRICS AND GYNAECOLOGY)
(As per MCI Regulations Governing PG Programme 2000 Amended up to May, 2018)

I. PREAMBLE:

The purpose of PG education is to create specialists who would provide high quality health care and advance the cause of science through research & training.

The purpose of MS Obstetrics and Gynaecology is to standardize Obstetrics & Gynaecology teaching at Post Graduate level throughout the country so that it will benefit in achieving uniformity in undergraduate teaching as well and resultantly creating competent Obstetrician and Gynaecologist with appropriate expertise.

The purpose of this document is to provide teachers and learners illustrative guidelines to achieve defined outcomes through learning and assessment. This document was prepared by various subject-content specialists. The Reconciliation Board of Academic Committee has attempted to render uniformity without compromise to purpose and content of the document. Compromise in purity of syntax has been made in order to preserve the purpose and content. This has necessitated retention of “domains of learning” under the heading “competencies”.

II. SUBJECT SPECIFIC LEARNING OBJECTIVES

Programme Objectives

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

- a. Provide quality care to the community in the diagnosis and management of Antenatal, Intra-natal and Post-natal period of normal and abnormal pregnancy and labor.
- b. provide effective and adequate care to a pregnant woman with complicated pregnancy.
- c. provide effective and adequate care to a normal and high risk neonate.
- d. perform obstetrical ultrasound in normal and abnormal pregnancy including Doppler.
- e. manage effectively all obstetrical and gynecological emergencies and if necessary make appropriate referrals.
- f. provide quality care to the community in the diagnosis and management of gynaecological problems including screening, and management of all gynecological cancers including during pregnancy.
- g. conduct a comprehensive evaluation of infertile couple and have a broad based knowledge of assisted reproductive techniques including – ovulation induction,

- in vitro* fertilization and intra-cytoplasmic sperm injection, gamete donation, surrogacy and the legal and ethical implications of these procedures.
- h. provide counseling and delivery of fertility regulation methods including reversible and irreversible contraception, emergency contraception etc.
 - i. provide quality care to women having spontaneous abortion or requesting Medical Termination of Pregnancy (MTP) and manage their related complications.

III. SUBJECT SPECIFIC COMPETENCIES

A. Cognitive Domain

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

- recognizes the health needs of women and adolescents and carries out professional obligations in keeping with principles of National Health Policy and professional ethics
- has acquired the competencies pertaining to Obstetrics and Gynaecology that are required to be practiced in the community and at all levels of health system
- on genetics as applicable to Obstetrics.
- on benign and malignant gynecological disorders.
- on Gynecological Endocrinology and infertility.
- on interpretation of various laboratory investigations and other diagnostic modalities in Obstetrics & Gynecology.
- on essentials of Pediatric and adolescent Gynecology.
- on care of postmenopausal women and geriatric Gynecology.
- on elementary knowledge of female breast & its diseases.
- on vital statistics in Obstetrics & Gynecology.
- Anesthesiology related to Obstetrics & Gynecology.
- Reproductive and Child Health, family welfare & reproductive tract infections.
- STD and AIDS & Government of India perspective on women's health related issues.
- Medico-legal aspects in Obstetrics & Gynecology.
- Asepsis, sterilization and disposal of medical waste.
- be able to effectively communicate with the family and the community
- is aware of the contemporary advances and developments in medical sciences as related to Obstetrics and Gynaecology.
- maintain medical records properly and know the medico-legal aspects in respect of Obstetrics & Gynecology
- Understands the difference between audit and research and how to plan a research project and demonstrate the skills to critically appraise scientific data and literature
- has acquired skills in educating medical and paramedical professionals

Ethical and Legal Issues:

The post graduate student should understand the principles and legal issues surrounding informed consent with particular awareness of the implication for the unborn child, postmortem examinations consent to surgical procedures including tubal

ligation/vasectomy, parental consent and medical certification, research and teaching and properly maintain medical records.

Risk Management:

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

Confidentiality:

The post graduate student should:

- be aware of the relevant strategies to ensure confidentiality and when it might be broken.
- understand the principles of adult teaching and should be able to teach common practical procedures in Obstetrics and Gynaecology and involved in educational programme in Obstetrics and Gynaecology for medical and paramedical staff.
- be abreast with all recent advances in Obstetrics and Gynaecology and practice evidence based medicine.

Use of information technology, audits and standards:

The post graduate student should:

- acquire a full understating of all common usage of computing systems including the principles of data collection, storage, retrieval, analysis and presentation.
- understand quality improvement and management and how to perform, interpret and use of clinical audit cycles and the production and application of clinical standards, guidelines and protocols.
- understand National Health Programmes related to Obstetrics and Gynaecology and should be aware of all the Acts and Laws related to specialty.

Health of Adolescent Girls and Post-Menopausal Women The student should:

- Recognize the importance of good health of adolescent and postmenopausal women.
- Identification and management of health problems of post-menopausal women.
- Understanding and planning and intervention program of social, educational and health needs of adolescent girls and menopausal women.
- Education regarding rights and confidentiality of women's health, specifically related to reproductive function, sexuality, contraception and safe abortion.
- Geriatric problems.

Reproductive Tract and 'HIV' Infection

- Epidemiology of RTI and HIV infection in Indian women of reproductive age group.
- Cause, effect and management of these infections.
- HIV infections in pregnancy, its effects and management.
- Relationship of RTI and HIV with gynaecological disorders.
- Planning and implementation of preventive strategies.

Medico-legal Aspects

- Knowledge and correct application of various Acts and Laws while practicing Obstetrics and Gynaecology, particularly MTP Act and sterilization, Preconception and P.N.D.T. Act.

- Knowledge of importance of proper recording of facts about history, examination findings, investigation reports and treatment administered in all patients.
- Knowledge of steps recommended for examination and management of rape cases.
- Knowledge of steps taken in the event of death of a patient.

B. Affective Domain

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

C. Psychomotor Domain

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

Operative Skills in Obstetrics and Gynaecology

- Adequate proficiency in common minor and major operations, post-operative management and management of their complications.
- Operative procedures which must be done by P G students during training period:
(in graded manner - assisting, operating with senior person assisting, operating under supervision)

(Operations MUST BE DONE/OBSERVED during PG training programme and log book maintained)

1. **Obstetrics:** Venesection, culdocentesis Conduct normal deliveries Episiotomy and its repair
 - Application of forceps and ventouse (10).
 - Carry out caesarian section delivery (10 must be done)
 - Manual removal of placenta
 - Management of genital tract obstetrical injuries.
 - Post partum sterilization/Minilap tubal ligation (20 must be done)
 - Medical termination of pregnancy - various methods (20 must be done)
2. **Gynaecology:** Endometrial / cervical biopsy.
Dilatation and curettage
Coldocentesis, Colpotomy
 - Opening and closing of abdomen (10 must be done)
 - Operations for pelvic organ prolapse
 - Ovarian cyst operation
 - Operation for ectopic pregnancy
 - Vaginal and abdominal hysterectomy

Operations must be OBSERVED and/or ASSISTED when possible:

- Internal podalic version
- Caesarea Hysterectomy
- Internal iliac artery ligation
- Destructive obstetrical operations
- Tubal microsurgery
- Radical operations for gynaec malignancies
- Repair of genital fistulae
- Operations for incontinence
- Myomectomy, Laparoscopic and hysteroscopic surgery

Diagnostic Procedures

- Interpretation of x-rays - Twins, common fetal malformations / mal-presentations, abnormal pelvis (pelvimetry), Hysterosalpingography
- Sonographic pictures at various stages of pregnancy - normal and abnormal pregnancies, Fetal biophysical profile, common gynaecological pathologies.
- Amniocentesis
- Fetal surveillance methods - Electronic fetal monitoring and its interpretation
- Post-coital test
- Vaginal Pap Smear
- Colposcopy
- Endoscopy - Laparo and Hystero-scopy.

Health of Adolescent Girls and Post-Menopausal Women

- Provide advice on importance of good health of adolescent and postmenopausal women.
- Identification and management of health problems of post-menopausal women.
- Planning and intervention program of social, educational and health needs of adolescent girls and menopausal women.
- Provide education regarding rights and confidentiality of women's health, specifically related to reproductive function, sexuality, contraception and safe abortion.
- Provide advice on geriatric problems.

Reproductive Tract and 'HIV' Infection

- Provide advice on management of RTI and HIV infections in Indian women of reproductive age group.
- Provide advice on management of HIV infections in pregnancy, relationship of RTI and HIV with gynaecological disorders.
- Planning and implementation of preventive strategies.

Medico-legal Aspects

- Correct application of various Acts and Laws while practicing obstetrics and gynaecology, particularly MTP Act and sterilization, Preconception and P.N.D.T. Act.
- Implement proper recording of facts about history, examination findings, investigation reports and treatment administered in all patients.
- Implement the steps recommended for examination and management of rape cases.
- Follow proper procedures in the event of death of a patient.

Environment and Health

- Follow proper procedures in safe disposal of human body fluids and other materials.
- Follow proper procedures and universal precautions in examination and surgical procedures for the prevention of HIV and other diseases.

IV. SYLLABUS**Course Contents:****Paper I****1. Basic Sciences**

- Normal and abnormal development, structure and function (female and male) urogenital system and female breast.
- Applied Anatomy of genito-urinary system, abdomen, pelvis, pelvic floor, anterior abdominal wall, upper thigh (inguinal ligament, inguinal canal, vulva, rectum and anal canal).
- Physiology of spermatogenesis.
- Endocrinology related to male and female reproduction (Neurotransmitters).
- Anatomy and physiology of urinary and lower GI (Rectum / anal canal) tract.
- Development, structure and function of placenta, umbilical cord and amniotic fluid.
- Anatomical and physiological changes in female genital tract during pregnancy.
- Anatomy of fetus, fetal growth and development, fetal physiology and fetal circulation.
- Physiological and neuro-endocrinal changes during puberty, adolescence, menstruation, ovulation, fertilization, climacteric and menopause.
- Biochemical and endocrine changes during pregnancy, including systemic changes in cardiovascular, hematological, renal hepatic, renal, hepatic and other systems.
- Biophysical and biochemical changes in uterus and cervix during pregnancy and labor.
- Pharmacology of identified drugs used during pregnancy, labour, post-partum period in reference to their absorption, distribution, excretion, (hepatic) metabolism, transfer of the drugs across the placenta, effect of the drugs (used) on labor, on fetus, their excretion through breast milk.
- Mechanism of action, excretion, metabolism of identified drugs used in the management of Gynaecological disorder.
- Role of hormones in Obstetrics and Gynaecology.
- **Markers in Obstetrics & Gynaecology** - Non-neoplastic and neoplastic diseases
- Pathophysiology of ovaries, fallopian tubes, uterus, cervix, vagina and external genitalia in healthy and diseased conditions.
- Normal and abnormal pathology of placenta, umbilical cord, amniotic fluid and fetus.
- Normal and abnormal microbiology of genital tract. Bacterial, viral and parasitical infections responsible for maternal, fetal and gynaecological disorders.

- Humoral and cellular immunology in Obstetrics & Gynaecology.
- Gametogenesis, fertilization, implantation and early development of embryo.
- Normal Pregnancy, physiological changes during pregnancy, labor and puerperium.
- Immunology of pregnancy.
- Lactation.

2. Medical Genetics

- Basic medical genetics including cytogenetics.
- Pattern of inheritance
- Chromosomal abnormalities - types, incidence, diagnosis, management and recurrence risk.
- General principles of Teratology.
- Screening, counseling and prevention of developmental abnormalities.
- Birth defects - genetics, teratology and counseling.

Paper II

Clinical obstetrics

1. Antenatal Care:

- Prenatal care of normal pregnancy including examination, nutrition, immunization and follow up.
- Identification and management of complications and complicated of pregnancy – abortion, ectopic pregnancy, vesicular mole, Gestational trophoblastic Diseases, hyperemesis gravidarum, multiple pregnancy, antipartum hemorrhage, pregnancy induced hypertension, preeclampsia, eclampsia, Other associated hypertensive disorders, Anemia, Rh incompatibility, diabetes, heart disease, renal and hepatic diseases, preterm - post term pregnancies, intrauterine fetal growth retardation,
- Neurological, hematological, dermatological diseases, immunological disorders and other medical and surgical disorders/problems associated with pregnancy, Multiple pregnancies, Hydramnios, Oligoamnios.
- Diagnosis of contracted pelvis (CPD) and its management.
- High-risk pregnancy
 - Pregnancy associated with complications, medical and surgical problems.
 - Prolonged gestation.
 - Preterm labor, premature rupture of membranes.
 - Blood group incompatibilities.
 - Recurrent pregnancy wastage.
- 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. Prenatal diagnostic modalities including modern ones.
- Infections in pregnancy (bacterial, viral, fungal, protozoan)
 - Malaria, Toxoplasmosis.
 - Viral – Rubella, CMV, Herpes, HIV, Hepatic viral infections (B, C etc)
 - Sexually Transmitted Infections (STDs)
 - Mother to fetal transmission of infections.

- Identification and management of fetal malpositions and malpresentations.
- Management of pregnancies complicated by medical, surgical (with other specialties as required) and gynecological diseases.
 - Anemia, hematological disorders
 - Respiratory, Heart, Renal, Liver, skin diseases.
 - Gastrointestinal, Hypertensive, Autoimmune, Endocrine disorders.
 - Associated Surgical Problems.
 - Acute Abdomen (surgical emergencies - appendicitis and GI emergencies). Other associated surgical problems.
 - Gynaecological disorders associate with pregnancy - congenital genital tract developmental anomalies, Gynaec pathologies - fibroid uterus, Ca Cx, genital prolapse etc.
 - Prenatal diagnosis (of fetal problems and abnormalities), treatment – Fetal therapy
 - M.T.P, PC & P.N.D.T Act etc
 - National health MCH programs, social obstetrics and vital statistics
 - Recent advances in Obstetrics.

2. Intra-partum care:

- Normal labor - mechanism and management.
- Partographic monitoring of labor progress, recognition of abnormal labor and its appropriate management.
- Identification and conduct of abnormal labor and complicated delivery - breech, forceps delivery, caesarian section, destructive operations.
- Induction and augmentation of labor.
- Management of abnormal labor - Abnormal pelvis, soft tissue abnormalities of birth canal, mal-presentation, mal-positions of fetus, abnormal uterine action, obstructed labor and other distocias.
- Analgesia and anaesthesia in labor.
- Maternal and fetal monitoring in normal and abnormal labor (including electronic fetal monitoring).
- Identification and management of intrapartum complications, Cord presentation, complication of 3rd stage of labor - retained placenta, inversion of uterus, rupture of uterus, post partum hemorrhage.

3. Post Partum

- Complication of 3rd stage of labor retained placenta, inversion of uterus, post partum hemorrhage, rupture of uterus, Management of primary and secondary post-partum hemorrhage, retained placenta, uterine inversion. Post-partum collapse, amniotic fluid embolism
- Identification and management of genital tract trauma - perineal tear, cervical/vaginal tear, episiotomy complications, rupture uterus.
- Management of critically ill woman.
- Post partum shock, sepsis and psychosis.
- Postpartum contraception.
 - Breast feeding practice; counseling and importance of breast-feeding. Problems in breast-feeding and their management, Baby friendly practices.
- Problems of newborn - at birth (resuscitation), management of early neonatal problems.

- Normal and abnormal purpura - sepsis, thrombophlebitis, mastitis, psychosis. Hematological problems in Obstetrics including coagulation disorders. Use of blood and blood components/products.

4. Operative Obstetrics:

- Decision-making, technique and management of complications.
- Vaginal instrumental delivery, Caesarian section, Obst. Hysterectomy, destructive operations, manipulations (External/internal podalic version, manual removal of placenta etc)
- Medical Termination of Pregnancy - safe abortion - selection of cases, technique and management of complication. MTP law.

5. New Born

1. Care of new born: 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 and Fertility Regulation

- Epidemiology and etiopathogenesis of gynaecological disorders.
- Diagnostic modalities and management of common benign and malignant gynaecological diseases (diseases of genital tract):
Fibroid uterus
Endometriosis and adenomyosis Endometrial hyperplasia
Genital prolapse (uterine and vaginal)
Cervical erosion, cervicitis, cervical polyps, cervical neoplasia. Vaginal cysts, vaginal infections, vaginal neoplasia (VIN) Benign Ovarian pathologies
Malignant genital neoplasia - of ovary, Fallopian tubes, uterus, cervix, vagina, vulva and Gestational Trophoblastic diseases, Cancer Breast.
- Diagnosis and surgical management of clinical conditions related to congenital malformations of genital tract. Reconstructive surgery in gynaecology.
- Intersex, ambiguous sex and chromosomal abnormalities.
- Reproductive endocrinology: Evaluation of Primary/secondary Amenorrhea, management of Hyperprolactinemia, Hirsutism, Chronic an-ovulation, PCOD, thyroid and other endocrine dysfunctions.
- Infertility - Evaluation and management
 - Methods of Ovulation Induction
 - Tubal (Micro) surgery
 - Management of immunological factors of Infertility
 - Male infertility
 - Obesity and other Infertility problems.
 - **(Introductory knowledge of)** Advanced Assisted Reproductive Techniques (ART)
- Reproductive tract Infections: prevention, diagnosis and treatment.
 - STD

- HIV
- Other Infections
- Genital Tuberculosis.
- Principles of radiotherapy and chemotherapy in gynaecological malignancies. Choice, schedule of administration and complications of such therapies.
- Rational approach in diagnosis and management of endocrinal abnormalities such as: menstrual abnormalities, amenorrhea (primary/secondary), dysfunctional uterine bleeding, polycystic ovarian disease, hyperprolactinemia (galactorrhea), hyperandrogenism, thyroid - pituitary - adrenal disorders, menopause and its treatment (HRT).
- Urological problems in Gynaecology - Diagnosis and management.
 - Urinary tract infection
 - Urogenital Fistulae
 - Incontinence
 - Other urological problems
- Orthopedic problems in Gynaecology.
- Menopause: management (HRT) and prevention of its complications.
- Endoscopy (Laparoscopy - Hysteroscopy)
 - Diagnostic and simple therapeutic procedures (PG students must be trained to do these procedures)
 - Recent advances in gynaecology - Diagnostic and therapeutic
 - Pediatric, Adolescent and Geriatric Gynaecology
 - **Introduction to Advance Operative procedures.**

Operative Gynaecology

Abdominal and Vaginal Hysterectomy

Surgical Procedures for genital prolapse, fibromyoma, endometriosis, ovarian, adenexal, uterine, cervical, vaginal and vulval pathologies.

Surgical treatment for urinary and other fistulae, Urinary incontinence Operative Endoscopy

Family Welfare and Demography

- Definition of demography and its importance in Obstetrics and Gynaecology.
- Statistics regarding maternal mortality, perinatal mortality/morbidity, birth rate, fertility rate.
- Organizational and operational aspects of National health policies and programs, in relation to population and family welfare including RCH.
- Various temporary and permanent methods of male and female contraceptive methods.
- Knowledge of in contraceptive techniques (including recent developments).
 1. Temporary methods
 2. Permanent Methods.
 3. Recent advances in contraceptive technology
- Provide adequate services to service seekers of contraception including follow up.
- Medical Termination of Pregnancy: Act, its implementation, providing safe and adequate services.
- Demography and population dynamics.
- Contraception (fertility control)

Male and Female Infertility

- History taking, examination and investigation.
- Causes and management of male infertility.
- Indications, procedures of Assisted Reproductive Techniques in relation to male infertility problems.

V. TEACHING AND LEARNING METHODS**Postgraduate Training**

Teaching methodology should be imparted to the students through:

- Lectures, seminars, symposia, Inter- and intra- departmental meetings (clinic-pathological, Radio-diagnosis, Radiotherapy, Anaesthesia, Pediatrics/ Neonatology), maternal morbidity/mortality meetings and journal club. **Records of these are to be maintained by the department.**
- By encouraging and allowing the students to attend and actively participate in CMEs, Conferences by presenting papers.
- Maintenance of log book: Log books shall be checked and assessed periodically by the faculty members imparting the training.
- Writing thesis following appropriate research methodology, ethical clearance and good clinical practice guidelines.
- The postgraduate students shall be required to participate in the teaching and training programme of undergraduate students and interns.
- A postgraduate student of a postgraduate degree course in broad specialities/super specialities would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him eligible to appear at the postgraduate degree examination.
- Department should encourage e-learning activities.

Practical and Clinical Training

- Emphasis should be self learning, group discussions and case presentations.
- Student should be trained about proper History taking, Clinical examination, advising / ordering relevant investigations, their interpretation and instituting medical / surgical management by posting students in OPD, specialty clinics, wards, operation theaters, Labor room, family planning clinics and other departments like anesthesiology, neonatology, radiology/ radiotherapy. **Students should be able to perform and interpret ultra - sonography in Obstetrics and Gynaecology, NST, Partogram**

Rotations:

- Details of 3 years posting in the PG programme (6 terms of 6 months each)
 - a. **Allied posts should be done during the course – for 8 weeks**
 - i. Neonatology - 2 weeks
 - ii. Anaesthesia - 2 weeks

- iii. Radiology/Radiotherapy - 2 weeks
- iv. Surgery - 2 weeks
- v. Oncology - 2 weeks

- b. Details of training in the subject during resident posting
The student should attend to the duties (Routine and emergency):
Out patient Department and special clinics
Inpatients
Operation Theater
Labor Room

Writing clinical notes regularly and maintains records.

1 st term -	working under supervision of senior residents and teaching faculty.	
2 nd & 3 rd term-	Besides patient care in O.P.D.,	wards, Casualty
	and labor room, carrying out minor	operations under
	supervision and assisting in major operation.	
4 th 5 th & 6 th term	independent duties in management of patient including	
	major operations under supervision of	teaching faculty

- c. Surgeries to be done during PG training. **(Details in the Syllabus)**

During the training programme, patient safety is of paramount importance; therefore, skills are to be learnt initially on the models, later to be performed under supervision followed by performing independently; for this purpose, provision of surgical skills laboratories in medical colleges is mandatory.

VI. ASSESSMENT

FORMATIVE ASSESSMENT, during the training includes

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

General Principles

Internal Assessment should be frequent, cover all domains of learning and used to provide feedback to improve learning; it should also cover professionalism and communication skills. The Internal Assessment should be conducted in theory and clinical examination.

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

- 1. Journal based / recent advances learning**
- 2. Patient based /Laboratory or Skill based learning**
- 3. Self directed learning and teaching**
- 4. Departmental and interdepartmental learning activity**
- 5. External and Outreach Activities / CMEs**

The student to be assessed periodically as per categories listed in postgraduate student appraisal form (Annexure I).

SUMMATIVE ASSESSMENT, ie., assessment at the end of training

The summative examination would be carried out as per the Rules given in POSTGRADUATE MEDICAL EDUCATION REGULATIONS, 2000.

Postgraduate Examination shall be in three parts:

1. Thesis

Every post graduate student 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 post graduate student to the techniques of research, critical analysis, acquaintance with the latest advances in medical science and the manner of identifying and consulting available literature.

Thesis shall be submitted at least six months before the Theory and Clinical / Practical examination. The thesis shall be examined by a minimum of three examiners; one internal and two external examiners, who shall not be the examiners for Theory and Clinical examination. A post graduate student shall be allowed to appear for the Theory and Practical/Clinical examination only after the acceptance of the Thesis by the examiners.

2. Theory Examination:

The examinations shall be organised on the basis of 'Grading' or 'Marking system' to evaluate and to certify post graduate student's level of knowledge, skill and competence at the end of the training. Obtaining a minimum of 50% marks in 'Theory' as well as 'Practical' separately shall be mandatory for passing examination as a whole. The examination for M.D./ MS shall be held at the end of 3rd academic year. An academic term shall mean six month's training period.

There should be four theory papers, as given below:

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

3. Clinical/Practical & oral/viva voce Examination: shall be as given below:

a) Obstetrics:

Clinical

Long Case: 1 case
 2 cases with different problems
 Short Case/ Spot Case: 1 case

Viva voce including:

- Instruments
- Pathology specimens

- Drugs and X-rays, Sonography etc.
- Dummy Pelvis

b) Gynaecology:

Clinical

Long Case: 1 case

2 cases with different problems

Short Case/ Spot Case: 1 case

Viva including:

- Instruments
- Pathology specimens
- Drugs and X-rays, Sonography etc.
- Family planning

VII. MANDATORY COMPLIANCE

- | | | |
|---|---|--------------------------|
| 1 | The Model Weekly Time Table for Teaching learning activities is enclosed as | : Annexure – I |
| 2 | Mandatory compliance of a PG student in T.L. process and CIA during the three year of study are given in | : Annexure – II |
| 3 | The units for Quarterly assessment for CIA is given in | : Annexure – III |
| 4 | Post Graduate student Quarterly Appraisal form for CIA is enclosed as | : Annexure – IV |
| 5 | Mandatory Requirements to be eligible to appear for the University Summative Evaluation Examination is given in | : Annexure – V |
| 6 | The Proforma of the Certificate on Attendance, Training Completion, Publication and Presentation Research / Poster / oral submission of Dissertation and present of all theory practical fee to be duly filled in and duly signed by PG Guide HOD, Finance Officer, Dean of faculty an HOI to be submitted to university COE before the issue of Hall Ticket for final exam is given us | : Annexure – VI |
| 7 | The model QP pattern of paper I/II/III/IV, each of 100 marks and of 3 hours duration is enclosed as | : Annexure – VII |
| 8 | The model Blue print for setting of Question papers and proper verbs/ phrases to be used in QP setting is given in | : Annexure – VIII |
| 9 | The model marks list for practical and Vivavoce for PG medical MD/MS/ examination is enclosed as. | : Annexure – IX |

VIII. RECOMMENDED READING:

Books (latest edition)

Obstetrics

1. William Textbook of Obstetrics
2. High risk Obstetrics - James
3. High risk pregnancy - Ian Donal
4. Text book of Operative Obstetrics - Munro Kerr.

5. Medical disorder in pregnancy - De Sweit
6. High risk pregnancy - Arias
7. A text book of Obstetrics - Thrbull
8. Text book of Obstetrics - Holland & Brews.
9. Manual of Obstetrics - Daftary & Chakravarty

Gynaecology

1. Text book of Gynaecology - Novak
2. Text book of Operative Gynaecology - Te-lindes
3. Text book of operative gynaecology - Shaws
4. Text book of Gynaecology and Reproductive Endocrinology - Speroft
5. Text book of Obstetrics & Gynaecology - Dewhurst
6. Manual of Gynaecological Oncology - Disai
7. Text book of Gynaecology – Jaeffcot

Journals

03-05 international Journals and 02 national (all indexed) journals

Annexure - I**P.G. Teaching Time Table – Model**

Clinical postings (OPD – IPD Duties Ward Rounds, Casualty posting, ICU posting, posting to support Departments like Radiology, Anaesthesia CCL , Pathology, FMT, Postings to field work and PHCs Camps and other postings as per provisions of MCI, are mandatory on all week Day as per posting.

Day of the week	Time 03 to 5 PM
Monday	Journal Club
Tuesday	Case presentation / Micro Clinic- Patient based Training
Wednesday	Seminar / GD / Panel Discussion
Thursday	Lecture by Faculty on select Topics
Friday	Clinical Meet / CPC / CME
Saturday	Guest Lecture by Experts / Skill Lab or Simulation Lab
Sunday (Select ones)	Medical Camps / Blood Donation Camp / Other types of Camps

Note

1. The Dept may select suitable days for a particular task assigned. But all of 7 tasks per week are a must
2. All the PG Teachers, PG students must attend these PG TLE Activities.
3. Attendance for these activities shall be maintained at the Department and Institutions. Implementation of the MCI Regulations, Syllabus and Time Table is the responsibility of HOD / HOI.

HOD**HOI****DEAN OF FACULTY****REGISTRAR**

Annexure – II

**Mandatory Compliance of a PG student in Teaching – Learning
Activities
As per MCI Regulations Syllabus and Advisory**

Sr. No.	Activities to be carried at by a PG student	Number per I st year (Minimum)	Number Per II nd Year (Minimum)	Number per III rd year (Minimum)	Total Number (Minimum) For 3 years
1	Presentation of Journal Articles in Journal club	12	12	6	30
2	a Case Presentation / Clinic	4	8	8	20
	b Skill Lab & Simulation	4	4	4	12
3	a Presentation of Seminars	4	4	4	12
	b Leading a Group Discussion on a select Topic	4	4	4	12
	c Assignment submission	4	4	4	12
4	a Lectures / Tutorials to UG students /panel Discussion	4	4	4	12
	b Clinical meeting CMC/ CPC	12	12	12	36
	c BLS	1	--	--	1
	d ACLS	1	--	--	1
5	Medical Camps Health Checkup at Villages / Schools/ Blood Donation / etc.	6	6	6	18
6	a Orientation Programme	1	1	1	3
	b Research Methodology Workshop	1	--	--	1
	C Presentation of synopsis of the Thesis / Dissertation	1	--	--	1
	d Presentation of Mid Term work of Thesis / Dissertation	--	1	--	1
	e Presentation of final Draft of Dissertation / Thesis	--	--	1	1
	f Presentation of Research Article	--	0 or 1	0 or 1	1
	g Publication of an Article	--	0 or 1	0 or 1	1 or 2
7	LOG Book	1 (a)	1 (b)	1 (c)	1 a+b+c
8	CIA	4	4	4	12
9	Any other Activity Specified by Dept.				

- Note :- 1. The Department may conduct periodic preparatory tests in Theory / Practical/Clinicals and Vivavoce. Quiz and MCQ test may to be adopted
2. The 12th CIA may also include a preparation examination on the model of university examination as a training cum assessment

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Annexure – III

Units of Quarterly Assessment of Every student (Internal)
Formative Assessment – Quarterly Assessment (Total 12 CIAs)
 As per Annexure III.

1. Journal Based / Recent Advances learning

(Bases on Journal Clubs / Select Article Presentation , Review Article preparation and presentation)

2. Patient Based and Laboratory Based and skill Based learning

(Based on clinical Posting – OPD / IPD Ward Rounds/ casualty/ Case Examination/ presentation /Diagnosis / Interpretation /of Clinical Diagnostics/ Differential Diagnosis, Prognosis/ Morbidity/ Mortality/ Community Medicine/ Promotion/ prevention/ Control/ Prophylaxis/ Epidemiology/ Simulation Studies/ Skill Based Studies and so on)

3. Self Directed Learning and Teaching

(Seminars Panel Discussion Group Discussion, Assignments, Case studies, Preparation of Charts and Models etc. , Role Play, Debates, Moot courts, etc)

4. Departmental and Inter Departmental Learning Activities.

(Participation in UG/PG teaching / Horizontal and Vertical Integrated Lectures, Clinical meeting / CPC / CME)

5. External and out research Activities

(Participation in Camps, Posting and Visit to PHCs, Satellite clinics, Mobile Clinics, Health checkup Camps, Blood Donation Camps, Immunization Camps school Visits. Crisis / Disaster Management, Celebration of Commemorative Days and soon)

6. Thesis / Dissertation Research Work related to selected Topic**7. a) Log Book maintenance/ Portfolio management - To maintain LOG Book or portfolio management of all the TL Activities****b) Presentation / Publications of Research Article**

No.	Particulars	Minimum for 3 months
1	Journal based Recent Advance Learning- Presentation of select Article in Journal clubs	3
2	a) Patient Based laboratory or Skill based learning- Case presentation / Clinic	1 (1 st year) 2 (2 nd & 3 rd year)
	b) Skill Lab / Simulation Lab Work	1
3	a) Self Directed Learning & Teaching- Presentation of Seminar	1
	b) Leading a Group Discussion on select Topic in GD	1
	c) Assignment Submission	1
4	a) Lecture / Tutorials / Panel Discussions with UG students	1
	b) Clinical Meetings (CME's) CPC/Dept. meeting	3
5	Medical Camps	1
6	Dissertation Work Research methodology workshop	Yes / No
7	Log Book & Attendance	Yes / No
8	Any other Activity Prescribed (T/P/Viva)	Yes / No

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Annexure IV

Postgraduate Students Appraisal Form
Pre / Para /Clinical Disciplines – MD/MS Degree

Name of the Department/Unit : Roll No.:
 Name of the PG Student :
 Period of Training : FROM.....TO.....
 Quarterly Assessment (1/2/3/4/5/6/7/8/9/10/11/12)

Sr. No.	PARTICULARS	Not Satisfactory			Satisfactory			More Than Satisfactory			Remarks
		1	2	3	4	5	6	7	8	9	
1.	Journal based / Recent advances learning										
2.	Patient based/Laboratory or Skill based learning										
3.	Self-directed learning and teaching										
4.	Departmental and interdepartmental learning activity										
5.	External and Outreach Activities / CMEs										
6.	Thesis / Research work										
7.	Log Book Maintenance										
8.	Performance in Theory/Practical/Viva voce Tests										
	Overall Assessment										

- Publications of Research Article Yes/No
- Presentation of Research Article
- The student has complied with mandatory requirement for quarterly assessment & presentation of Research Profile Yes/No

Remarks* _____

***REMARKS:** Any significant positive or negative attributes of a postgraduate student to be mentioned. For score less than 4 in any category, remediation must be suggested. Individual feedback to postgraduate student is strongly recommended.

SIGNATURE OF ASSESSEE

SIGNATURE OF HOD

 HEAD OF THE INSTITUTION

Annexure - V

**Mandatory Requirements to be eligible to appear for
university Summative Examination / Evaluation – As per MCI Regulations.
(As per MCI Medical Education Regulation 2000, amended from time to time till
date)**

1. Minimum percent of Attendance as per MCI Regulations.
2. Satisfactory performance in 12 CIA conducted and certified by HOD HOI and PG Guide.
3. Certificate from F.O. stating that all the fees due from the student are paid and credited to PIMS-DU A/c
4. Presentation of a Research Article / Poster in a national / state level conference /Seminar / Workshop.
5. Publication of a Research Articles as first – author in (indexed in Scopus or Web of Science or as fixed by MCI Regulations and visited by UGC (ARE list).
6. a) Thesis – Finalisation of Topic and Title – submission of Synopsis following IEC clearance within 6 months of Adm. Topics
b) After II year of Admission or 3 terms Midterm Review .
c) Thesis to be submitted at least 6 months before final examination.
d) Thesis to be examined by 3 Examiners. (1 Internal and 2 External PG Examiners)
e) Its Acceptance is a must for appearing for University T & P Exam

Note :- HOD & HOI shall ensure provisions of 1,2,3,4,5,6 a,b,c. The COE shall ensure provisions of 1,2,3,4,5,6 a,b,c ,d,e & e as per MCI Regulations

**HEAD OF DEPARTMENT
REGISTRAR**

HEAD OF INSTITUTION

DEAN OF FACULTY

Annexure - VI

Ref. No. _____

Date: _____

Compliance to MCI's Regulations Governing Post Graduate Programme in Medical Faculty

Department of _____ PG Programme: MD/ MS in _____

Name of Candidate: _____, JR-III

PRN No. _____ Date of Admission _____

Certification on
Attendance and Training Completion
Publication & Presentation of Research Articles (Poster/ Oral)
Submission of Dissertation & Payment of All types of prescribed fees

It is hereby certified that the said candidate JR-III in the Dept. of _____ at Rural Medical College has completed 6 academic terms/ 3 academic years and fulfilled the prevailing provisions of the MCI Regulations governing MD/MS PG programmes and the rules of PMT, PIMS-DU. Details are as under.

1.	Attendance Fulfillment *	% Attendance	Remark – Eligibility
	I Academic Term		
	II Academic Term		
	III Academic Term		
	IV Academic Term		
	V Academic Term		
	VI Academic Term		
	Overall fulfillment		Fulfilled / Not Fulfilled
	* Fulfillment of a minimum of 80% of attendance/ academic term, for 6 terms/ 3 years including imparted training, assignment, fulltime responsibilities and participation in all facets of PG education process including periodic assessment and so on as per MCI Regulations.		
2.	Log Book maintained as per MCI Regulations & Fulfilled the graded responsibilities in the management and treatment of patients entrusted for their care Verified by Dr. _____ Certified by Dr. _____		Yes/ No
3.	Successful participation in teaching and training programmes organized by the department for UG and Interns		
4.	Presented and Participated in Seminars, Journal Clubs, Case Presentations, Group Discussions, Clinical Meetings, CME Ward Round, CPC, Practicals organized by the Department as per the timetable.		
5.	Participated in training sessions in diagnostics, medical/ surgical training, in basic/ applied medical and allied clinical specialties and Medical Camps as per the timetable		
6.	The Performance of the PG students in 12 CIAs (Conducted quarterly) are satisfactory as per appraisal proforma as per MCI Regulations.		

7.	Presented one research poster and one research article (oral) in a Seminar/ Symposia/ Workshop/ Conference (National/State). The certificates for presentation of paper/ poster are enclosed.	
8.	Published one research article in a scientific journal as per norms. The copy of the published research article is enclosed.	
9.	Submitted a Dissertation entitled _____ _____ _____ under the guidance of Dr. _____	
10.	Paid all the fees (tution fees and other fees) vide receipt No. _____ for all 3 years.	
11.	Produced NOC from all the sections of PMT PIMS-DU concerned about "NO DUES"	
12.	Paid Examination fees of Rs. _____ vide Challan/ Receipt No. _____ dated _____ issued by Finance Officer PIMS-DU.	

It is hereby declared that the all the duly certified and verified documents, related to the aspects mentioned above, are in the custody of department concerned and student section of Rural Medical College with due authentication and signature of concerned HOD/ Dean/ Principal/ Dean of Faculty) and will be made available for any MCI inspection as per norms and Regulations.

Accordingly He/She is eligible/ not eligible for appearing in final year PG examination as per the MCI Regulations governing PG Programmes.

PG Guide

Dr. _____

Seal

Head of the Department

Dr. _____

Verified and certified that all types of prescribed fees and fines PMT, PIMS-DU, College, Hostel & Others mentioned at sl.no. 10, 11, 12 are paid by the student and credited to the accounts of PMT & PIMS-DU.

Seal

Finance Officer
PIMS-DU

Verified the relevant documents and certify that the candidate is eligible to appear for final year PG Examination as per MCI Regulations and rules of PIMS-DU.

Dean

Faculty of Medicine

Seal

Dean

Rural Medical College

Ref _____

For Officer Use Only

Date: _____

The HOD, HOI and Dean have certified that the

- a. Candidate is eligible to appear for PG Theory and Practical/ Clinical Examination as per MCI Regulations. F.O. has certified that all the fees has been credited to PMT, PIMS-DU Accounts.
- b. The Dissertation submitted has been evaluated by external examiners and then have approved the same for acceptance as per MCI Regulations.
- c. Hence the candidate be permitted to appear for the PG examinations (Theory & Practical/ Clinical) scheduled in the month of _____ year _____.

Controller of Examinations



Submitted for perusal and approval

Vice Chancellor

Annexure – VII

**PRAVARA INSTITUTE OF MEDICAL SCIENCES
(Deemed to be University)**

Post Graduate Degree in Obstetrics and Gynecology (MS)

Examination _____ 20__

Paper – I/ II/ III/ IV

Paper Title : _____

Date: / /20

Marks : 100

Time:

Instructions to candidate:

- 1) All questions are compulsory
- 2) Answer written in illegible handwriting will not be assessed.
- 3) Write answers on both sides of answer paper.
- 4) Neat diagrams must be drawn wherever necessary.
- 5) Write prescription where indicated, and in the use of drugs their doses should be given.

Que. 1		Marks 20
Que. 2		Marks 20
Que. 3		Marks 20
Que. 4	Write Short notes on	Marks 40 (10x4)
	a	
	b	
	c	
	d	

Annexure – VIII

Table 1: Showing BLUEPRINTING for theory paper setting

The number of Questions & their distribution of marks shall be as per MCI model Question Paper [only Illustration]

LAQ/ SAQ and their Marks

LEVEL	Q	Q	Q	Q	Q	Q	Q	Total
	Mark	Mark	Mark	Mark	Mark	Mark	Mark	
Knowledge								
Comprehension								
Application								
Analysis								
synthesis								
Evaluation								
TOTAL								1000

The Questions (Whether LAQ or SAQ) Must aim at assessing all the 6 domains

Note: This is only an illustration. Actual Number of Questions and their distribution of marks shall be as per model Question Paper of MCI. (i.e. regarding the number of LAQ / SAQ and their marks distribution)

Table 2: Showing appropriate verbs suitable to level of knowledge for theory paper setting

Level	Suggested Verbs
Knowledge	Define, Describe, Draw, Find, Enumerate, Cite, Name, Identify, List, label, Match, Sequence, Write, State
Comprehension	Discuss, Conclude, Articulate, Associate, Estimate, Rearrange, Demonstrate understanding, Explain, Generalize, Identify, Illustrate, Interpret, Review, Summarize
Application	Apply, Choose, Compute, Modify, Solve, Prepare, Produce, Select, Show, Transfer, Use
Analysis	Analyze, Characterize, Classify, Compare, Contrast, Debate, Diagram, Differentiate, Distinguish, Relate, Categorize
Synthesis	Compose, Construct, Create, Verify, Determine, Design, Develop, Integrate, Organize, Plan, Produce, Propose, rewrite
Evaluation	Appraise, Assess, Conclude, Critic, Decide, Evaluate, judge, Justify, Predict, Prioritize, Prove, Rank

Table 3: Showing examples of theory questions

Sr. No.	Type	Explanation	Examples
1	Long essay question	<ul style="list-style-type: none"> ✓ Question should pose clinical problem that will require student to apply knowledge along with integration with disciplines ✓ Avoid one liner as question ✓ Question stem should be structured ✓ Marking distribution should be provided ✓ Use of proper verbs from higher domains as given in this document ✓ Avoid recall based questions 	
2	Short notes	<ul style="list-style-type: none"> ✓ Sample a wider content ✓ Questions should be task oriented ✓ Reasoning questions provide opportunity for testing integration, clinical reasoning and analytical ability of the student 	

Table 4: Showing Objective structured clinical examination [OSCE] typical station

Sr. No.	Type of station	Time allotted	Example	Evaluation
1	Procedure			
2	Response			

Annexure – IX

**University Examination
Model Marks Sheet
For Practical / Clinical Examination and Viva voce**

Duration _____
– 400

Max Mark

Illustration only

No.	Type of Examination	Marks Allotted	Scored
1	Long Cases		
2	a) Short cases (No. of small cases and Marks for each cases) 1/2/3/4----- b) Ward Round c) Any other		
3	Spotter / OSPE/ Oral / Vivavoce Sub Divisions i) iv) ii) v) iii) vi)		
	Ground Total	400	

PG Examiners		Name	Signature
1	Chairman Name		
2	Internal Examiner		
3	External Examiner		
4	External Examiner		

Date:-

Place :-

- Note:- 1) The Number of cases, type of cases and type of practical and orals / vivavoce and their distributions of marks shall be as per MCI Regulations / Syllabi.
2) The HOD / Chairman / Co Chairman BOS shall ensure at this proforma is prepared as per the MCI Regulations / Syllabi.



h. d. d. d. d.
Registrar
Pravara Institute of Medical Sciences
(Deemed to be University)
Loni - 413736, Tal. Rahata
Dist. Ahmednagar (M.S. India)