

# MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

#### Grade 'A++' Accredited by NAAC

Sector-01, Kamothe, Navi Mumbai -410 209 Tel 022-27432471, 022-27432994, Fax 022 -27431094

E-mail: registrar@mgmuhs.com; Website: www.mgmuhs.com

# COMPETENCY BASED MEDICAL EDUCATION (CBME)

(with effect from 2021-22 Batches)

Curriculum for Master of Surgery Obstetrics And Gynaecology

Amended upto AC-50/2024, Dated 27/11/2024

#### Amended History

- 1. Approved as per AC-44/2022, Resolution No.5.52; Dated 09/12/2022. 2. Amended upto AC-46/2023, Resolution No.5.37; Dated 28/04/2023 3. Amended upto AC-50/2024, Resolution No.4.91; Dated 27/11/2024.

**Resolution No.5.52 of Academic Council (AC-44/2022):** Resolved to approve the curriculum of MS (Obs & Gyn), as per CBME, to be implemented with effect from the batch admitted in Academic year 2021-22 onwards

# GUIDELINES FOR COMPETENCY BASED POSTGRADUATE TRAINING PROGRAMME FOR MS IN OBSTETRICS AND GYNAECOLOGY

#### **Preamble:**

Annexure-49 of AC-44/2022

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'.

### 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 riskneonate.
- 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 knowledgeof 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 contraceptionetc.
- i. Provide quality care to women having spontaneous abortion or requesting Medical Termination of Pregnancy (MTP) and manage their related complications.

#### SUBJECT SPECIFIC COMPETENCIES

#### A. CognitiveDomain

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 professionalethics
- 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 toObstetrics.
- 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 adolescentGynecology.
- on care of postmenopausal women and geriatricGynecology.
- 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 medicalwaste.
- be able to effectively communicate with the family and thecommunity
- isaware 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 professional

#### **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:

- beaware of the relevant strategies to ensure confidentiality and when it might bebroken.
- understand the principles of adult teaching and should be able to teach common practical procedures in Obstetrics and Gynaecology and involved in educational programmein Obstetrics and Gynaecology for medical and paramedical staff.
- beabreast with all recent advances in Obstetrics and Gynaecology and practice evidence basedmedicine.

#### 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 menopausalwomen.
- Education regarding rights and confidentiality of women's health,
   specifically related to reproductive function, sexuality, contraception and safeabortion.
- 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 theseinfections.
- HIV infections in pregnancy, its effects andmanagement.
- Relationship of RTI and HIV with gynaecological disorders.
- Planning and implementation of preventivestrategies.

#### **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 apatient.

#### **B.** Affectivedomain

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 secondopinion.
- 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. Psychomotordomain

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 undersupervision)

(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 bedone)
- Manual removal ofplacenta
- Management of genital tract obstetricalinjuries.
- Post partum sterilization/Minilap tubal ligation (20 must bedone)
- Medical termination of pregnancy various methods (20 must be done)
- **2. Gynaecology:** Endometrial / cervicalbiopsy.

Dilatation and curettage

- Opening and closing of abdomen (10 must bedone)
- Operations for pelvic organprolapse
- Ovarian cystoperation
- Operation for ectopic pregnancy
- Vaginal and abdominal hysterectomy

#### Operations must be OBSERVED and/or ASSISTED when possible:

- Internal podalicversion
- CaesareanHysterectomy
- Internal iliac arteryligation
- Radical operations for gynaecmalignancies
- Operations forincontinence
- Myomectomy, Laparoscopic and hysteroscopicsurgery

#### **Diagnostic Procedures**

- Interpretation of x-rays Twins, common fetal malformations / mal-presentations, Hysterosalpingography
- Sonographic pictures at various stages of pregnancy normal and abnormal pregnancies, Fetal biophysical profile, common gynaecologicalpathologies.
- Amniocentesis
- Fetal surveillance methods Electronic fetal monitoring and itsinterpretation
- Vaginal PapSmear
- 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-menopausalwomen.
- Planning and intervention program of social, educational and health needs of adolescent girls and menopausalwomen.
- Provide education regarding rights and confidentiality of women's health, specifically related to reproductive function, sexuality, contraception and safe abortion.
- Provide advice on geriatricproblems.

### Reproductive Tract and 'HIV' Infection

- Provide advice on management of RTI and HIV infections in Indian women of reproductive agegroup
- 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 apatient.

#### **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 otherdiseases.

### Syllabus

# **Course Contents:**

#### Paper I

#### 1. Basic Sciences

- Normal and abnormal development, structure and function (female and male) urogenital system and femalebreast.
- Applied Anatomy of genito-urinary system, abdomen, pelvis, pelvic floor, anterior abdominal wall, upper thigh (inguinal ligament, inguinal canal, vulva, rectum and analcanal).
- 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 duringpregnancy.
- Anatomy of fetus, fetal growth and development, fetal physiology and fetal circulation.
- Physiological and neuro-endocrinal changes during puberty, adolescence, menstruation, ovulation, fertilization, climacteric andmenopause.

- 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 diseasedconditions.
- Normal and abnormal pathology of placenta, umbilical cord, amniotic fluid and fetus.
- Normal and abnormal microbiology of genital tract. Bacterial, viral andparasitical 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 pauperism.
- Immunology of pregnancy.
- Lactation.

#### 2. MedicalGenetics

- Basic medical genetics including cytogenetics.
- Pattern ofinheritance
- 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 followup.
- 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 growthretardation,
- 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 itsmanagement.
- High-riskpregnancy
- Pregnancy associated with complications, medical and surgical problems.
- Prolongedgestation.
- Preterm labor, premature rupture ofmembranes.
- Blood groupincompatibilities.
- Recurrent pregnancywastage.
  - Evaluation of fetal and maternal health in complicated pregnancy by making use of diagnostic modalities including modern once (USG, Doppler, Electronic monitors) and plan for safe delivery for mother and fetus. Identifying fetus at risk and its management. Prenatal diagnostic modalities including modernones.
  - 2. Infections in pregnancy (bacterial, viral, fungal,protozoan)
- Malaria, Toxoplasmosis.
- Viral Rubella, CMV, Herpes, HIV, Hepatic viral infections (B, Cetc)
- Sexually Transmitted Infections(STDs)
- Mother to fetal transmission ofinfections.
  - 3. Identification and management of fetal malpositions andmalpresentations.
  - 4. Management of pregnancies complicated by medical, surgical (with other specialties as required) and gynecological diseases.
- Anemia, hematological disorders
- Respiratory, Heart, Renal, Liver, skindiseases.
- Gastrointestinal, Hypertensive, Autoimmune, Endocrinedisorders.
- Associated SurgicalProblems.
   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, CaCx, genital prolapse etc.
- M.T.P, PC & P.N.D.T Actetc
- National health MCH programs, social obstetrics and vitalstatistics
- Recent advances in Obstetrics.

#### 2. Intra-partumcare:

- Normal labor mechanism andmanagement.
- 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 anaesthesiainlabor.
- Maternal and fetal monitoring in normal and abnormal labor (including electronic fetalmonitoring).
- Identification and management of intrapartum complications, Cord presentation, complication of 3<sup>rd</sup> stage of labor retained placenta, inversion of uterus, rupture of uterus, post-partumhemorrhage.

#### 3. Post-Partum

- Complication of 3<sup>rd</sup> 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 fluidembolism
- Identification and management of genital tract trauma perineal tear, cervical/vaginal tear, episiotomy complications, ruptureuterus.
- Management of critically illwoman.
- Post partum shock, sepsis andpsychosis.
- Postpartumcontraception.
  - 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 purpureum sepsis, thrombophlebitis, mastitis, psychosis. Hematological problems in Obstetrics including coagulation disorders. Use of blood and bloodcomponents/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. MTPlaw.

#### 5. New Born

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

#### 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 genitaltract):

Fibroid uterus

Endometriosis and

adenomyosisEndometrial 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 ingynaecology.
- Intersex, ambiguous sex and chromosomalabnormalities.
- Reproductive endocrinology: Evaluation of Primary/secondary Amenorrhea, management of Hyperprolactinemia, Hirsutism, Chronic an-ovulation, PCOD, thyroid and other endocrinedysfunctions.
- Infertility Evaluation andmanagement
  - Methods of OvulationInduction

- Tubal (Micro)surgery
- Management of immunological factors ofInfertility
- Maleinfertility
- Obesity and other Infertilityproblems.
- (Introductory knowledge of) Advanced Assisted Reproductive Techniques(ART)
- Reproductive tract Infections: prevention, diagnosis andtreatment.
  - STD
  - HIV
  - OtherInfections
  - GenitalTuberculosis.
  - 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 (galoctorrhea), hyperandrogenism, thyroid pituitary adrenal disorders, menopause and its treatment(HRT).
- Urological problems in Gynaecology Diagnosis andmanagement.
  - Urinary tractinfection
  - UrogenitalFistulae
  - 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 theseprocedures)
  - Recent advances in gynaecology Diagnostic andtherapeutic
  - Pediatric, Adolescent and GeriatricGyanecology
  - Introduction to Advance Operative procedures.

#### **Operative Gynaecology**

- Abdominal and VaginalHysterectomy
- Surgical Procedures for genital prolapse, fibromyoma, endometriosis, ovarian, adenexal, uterine, cervical, vaginal and vulvalpathologies.
- Surgical treatment for urinary and other fistulae, Urinaryincontinence
- 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, fertilityrate.
- 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 recentdevelopments).
  - 1. Temporarymethods
  - 2. PermanentMethods.
  - 3. Recent advances in contraceptivetechnology
- Provide adequate services to service seekers of contraception including followup.
- Medical Termination of Pregnancy: Act, its implementation, providing safe and adequate services.
- Demography and population dynamics.
- Contraception (fertilitycontrol)

#### Male and Female Infertility

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

#### PAPER - IV

Recent Advances in Obstetrics & Gynecology

### 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 thedepartment*.
- By encouraging and allowing the students to attend and actively participate in CMEs, Conferences by presentingpapers.
- Maintenance of log book: Log books shall be checked and assessed periodically by the faculty members imparting thetraining.
- Writing thesis following appropriate research methodology, ethical clearance and good clinical practiceguidelines.
- 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 degreeexamination.
- Department should encourage e-learning activities.

#### **Practical and Clinical Training**

- Emphasis should be self learning, group discussions and casepresentations.
- 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 monthseach)
- a. Allied posts should be done during the course for a total of 8weeks

i. Neonatology - 2weeks
ii. Anaesthesia - 2weeks
iii. Radiology - 2 weeks
iv. Surgery - 2 weeks
v. Oncology - 2weeks

**b.** Details of training in the subject during residentposting

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<sup>st</sup> term- working under supervision of senior residents and teachingfaculty.

2<sup>nd</sup>&3<sup>rd</sup>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<sup>th</sup> 5<sup>th</sup>& 6<sup>th</sup>term- independent duties in management of patientincluding

major operations under supervision of teaching faculty

c. Surgeries to be done during PG training. (**Details in theSyllabus**)

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.

#### **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 advanceslearning
- 2. Patient based /Laboratory or Skill basedlearning
- 3. Self directed learning andteaching
- 4. Departmental and interdepartmental learningactivity
- 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 oftraining

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:

Paperl: Applied Basicsciences.

**PaperII:** Obstetrics including social obstetrics and Diseases of NewBorn

**PaperIII:** Gynaecology including fertility regulation

**PaperIV:** Recent Advances in Obstetrics & Gynaecology

3. Clinical/Practical & oral/viva voce Examination: shall be as givenbelow: a) Obstetrics:

#### Clinical

Long Case: 1 caseShort Case: 1 case

#### Viva voce including:

- Instruments
- Pathologyspecimens
- Drugs and X-rays, Sonographyetc.
- DummyPelvis and fetal skull
   Interpetation of investigation reports
- Interpretation of investigation reports, partogram, cardiotochograph

#### b) Gynaecology:

#### Clinical

Long Case: 1 caseShort Case: 1 case

#### Viva including:

- Instruments
- Pathologyspecimens
- Drugs and X-rays, Sonographyetc.
- Familyplanning
- Interpretation of investigation reports

#### **Recommended Reading:**

#### **Books (latest edition)**

#### **Obstetrics**

- 1. William Textbook of Obstetrics
- 2. High risk Obstetrics -James
- 3. High risk pregnancy IanDonald
- **4.** Text book of Operative Obstetrics Munro Kerr.
- **5.** Medical disorder in pregnancy DeSweit
- **6.** High risk pregnancy Arias
- 7. A text book of obstetrics Thmbull
- **8.** Text book of Obstetrics Holland & Brews
- **9.** Manual of Obstetrics Daftary&Chakravarty
- 10. Mannual of Obstetrics John Hopkins

#### **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 -Speroff
- 5. Text book of Obstetrics & Gynaecology Dewhurst
- 6. Manual of Gynaecological Oncology -Disai
- 7. Text book of Gynaecology Jaeffcot
- **8.** Text book of Assist reproductive Kamini Rao

#### **Journals**

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

# MGM INSTITUTE OF HEALTH SCIENCES, NAVI MUMBAI Resolution No. 4.91 of Academic Council (AC-50/2024): Resolved to

Resolution No. 4.91 of Academic approve the change in Post

Graduate practical exam Mark sheet for 2021-22 BatchAnnexure-105 of AC-50/2024

### MARKLIST FOR PRACTICAL AND VIVA-VOCE EXAMINATION

EXAM CENTRE: MGM Medical College & Hospital Kalamboli

COURSE / EXAM: PG -

DATE OF EXAMINATION:

**EXAMINATION FOR: MS (OBSTETRICS AND GYNAECOLOGY)** 

	1				2									
Obstet	Obstetrics Cases (A)		Gyr	Gynaec Cases (B)		Oho	Oha Tabla	Obs Table	Gyn					
1 Long Case	1 Short Case/Spot Case		1 Long Case	1 Short Case/Spot Case		Practical / Clinical Total	Instruments, Pathology specimens, Drugs and X-Rays, Sonography, Dummy Pelvis	Obs Viva	Table Instruments, Pathology specimens, Drugs and X-Rays, Sonography, Family Planning	Gyn Viva	Thesis Viva	OSCEs 2 x 10 Marks	Total	Grand Total Practi al (1+2)
60 Marks	40 Marks	Total 100	60 Marks	40 Marks	Total 100	200	30	50	30	50	20	20	200	400
						. 1					1			

NAME OF EXAMINER	COLLEGE	SIGNATURE WITH DATE

# FORMAT FOR SUBMISSION OF PROPOSAL / FELLOWSHIP COURSE

- Title of the Fellowship
   Fellowship in Cosmetic Gynecology (FICG)
- 2. Duration of the Fellowship
  - a. 1 Year (12 months)
  - b. Permissible leave during the course 12 days
- 3. Commencement (2 Batches)
  - a. 1st December 2024
  - b. 1st June 2025
- 4. Objectives of the Fellowship
  - a. Develop a comprehensive understanding of the complex anatomy and physiology of the female genital region, providing a solid foundation for safe and effective procedural interventions in normal or post-partum women.
  - b. Cultivate advanced surgical skills and meticulous technique necessary to perform a wide range of cosmetic gynecological procedures with optimal aesthetic outcomes.
  - c. Foster a patient-centered approach emphasizing empathy, effective communication, and the ability to address patient concerns and expectations with sensitivity.
  - d. Cultivate an artistic eye for achieving optimal aesthetic outcomes in genital rejuvenation.
  - e. Equip fellows with the knowledge and skills to stay abreast of the latest advancements in cosmetic gynecology, including emerging technologies and techniques.
  - f. Prioritize patient safety through rigorous training in risk management, complication prevention, and post-operative care.
  - g. Promote ethical practice by addressing the complexities of cosmetic gynecology, including body image concerns and consumerism.
  - h. Integrate a holistic approach to women's health by recognizing the potential for cosmetic gynecology to address functional issues such as urinary incontinence, pelvic organ prolapse, sexual dysfunction and personal preferences.

Through this comprehensive training program, fellows will emerge as highly skilled and compassionate practitioners capable of providing exceptional care to women seeking cosmetic gynecological procedures.

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Eligibility Criteria for Admission
 MD / DNB (Obs & Gyn) or DGO and other Equivalent Courses

#### Note:

- a. The eligibility of student for the fellowship/certificate course shall be the minimum qualification required by law to practice the skills as defined in the said fellowship / certificate course.
- b. For international students, valid proof to practice medicine in India is must as per the NMC norms. (MGM Institute of Health Sciences reserves all rights for admission to such international students / foreign graduates)

6. Intake Capacity in each batch Total Four in a year (2 every six months)

### 7. Admission/Selection Process / Procedure

Course shall be published on the University website. The desirous applicant / candidate shall have to apply online and need to pay the prescribed amount of application fees as decided by the university from time to time. The admission of the students or candidates for the concerned shall be on the basis of merit. The merit will be decided by university examination (written test and viva)

- a. Theory Test (50 marks)
- b. Viva (50 marks)

#### 8. Fees

- a. MGM Alumni 7 lakhs /annual
- b. Other Indian Students & SAARC Country Students 8 lakhs / annual
- c. International Students 14 lakhs / annual

# 9. Course Content (Detailed Syllabus in Annexure "A")

- a. Basics in Cosmetic Gynecology
- b. Female Sexuality
- c. Surgical Cosmetic Gynecology Procedures
- d. Minimally Invasive Cosmetic Procedures
- e. Non-Invasive Cosmetic Procedures
- f. Special Topics
- g. Urogynecology

#### 10. Teaching Scheme

The overall program will be more practically oriented emphasizing the students to apply their knowledge in a clinical setting. The teaching methodology will involve:-

- a. Lectures
- b. Case discussions
- c. Practical workshops
- d. Cadaveric dissection
- e. Live surgeries
- f. Seminars
- g. Journal clubs
- h. Research projects

#### **Additional Considerations:**

- a. Guest lectures: Invite national / international experts in the field to provide specialized knowledge.
- b. Simulation training: Use simulators for hands-on practice of surgical techniques
- c. Continuing education: Encourage fellows to attend conferences and workshops

By following this proposed teaching scheme, the fellowship program can provide a comprehensive and well-rounded education in cosmetic gynecology and female sexuality.

- 11. Academic Pre-requisites to complete fellowship
  - a. Paper publishing: 2 Original / Review articles + 2 Case Studies / Clinical Images
  - b. One Conference: National or International
  - c. Clinical Trial: Participate in ongoing clinical trials (if any)

#### 12. Textbook and Reference Books

#### Core Textbooks:

- a. Female Genital Plastic and Cosmetic Surgery by Michael P. Goodman
- b. Female Cosmetic Genital Surgery: Concepts, Classification, and Techniques by Christine A. Hamori, Paul E. Banwell, and Red Alinsod
- c. Aesthetic Vaginal Plastic Surgery: A Practical Guide by Lina Triana

#### Specialized Textbooks:

- a. Aesthetic and Functional Labiaplasty by Stefan Gress
- b. Female Urinary Incontinence by Anne P. Cameron
- c. Aesthetic Gynecology Rejuvenation by Alexander Bader

#### 13. Scheme of Examination (in detail)

- a. Credit based system (prerequisite to appear in exam). Logbook to be maintained of work done. The minimum number of cases to qualify competency may be set by the Fellowship Director.
- b. Periodic Assessment After each module, a assessment would be undertaken which will consist of MCQ, Theory and Practical.
- c. Annual Examination MCQ 50 marks, Theory 50 marks, Practical 100 marks
- 14. Infrastructure required for conducting the course and its availability in the College/Hospital
  - a. Mannequin of Female Pelvis
  - b. Centrifuge Machine for PRP
  - c. CO<sub>2</sub> LASER
  - d. Focused Functional Magnetic Stimulator
  - e. Microsurgical Instrument Set for Cosmetic Gynecology use
  - f. Dedicated OPD & Counselling Room (ensuring patient privacy)
  - g. Logistic Support for Interactive Teaching

# 15. Faculty required (with qualification) for conducting the course (refer Annexure "B")

#### **Program Director cum Mentor**

- a. Qualification
  - Associate Professor or Professor in Obstetrics & Gynecology with minimum 3 years exclusive experience in Cosmetic Gynecology in a established division at NMC recognized teaching institute or equivalent in case worked internationally.
  - ii. Assistant Professor in Obstetrics & Gynecology with minimum 5 years exclusive experience in Cosmetic Gynecology in a established division at NMC recognized teaching institute or equivalent in case worked internationally.
  - iii. Assistant Professor in Obstetrics & Gynecology with MCh in Cosmetic Gynecology from a NMC recognized teaching institute or equivalent.

### Additional Mentors (if required)

- Assistant Professor in Obstetrics & Gynecology with minimum 5 years exclusive experience in Cosmetic Gynecology in a established division at NMC recognized teaching institute or equivalent in case worked internationally.
- ii. Assistant Professor in Obstetrics & Gynecology with MCh in Cosmetic Gynecology from a NMC recognized teaching institute or equivalent.

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#### 16. Summary

A one-year Fellowship in Cosmetic Gynecology aims to cultivate highly skilled specialists who can deliver advanced, patient-centered care. The program integrates rigorous academic training, extensive surgical experience, and research to elevate the field of cosmetic gynecology and optimize patient outcomes. Beyond clinical expertise, fellows will collaborate with other specialists and contribute to research, fostering innovation and academic advancement.

# ANNEXURE "A"

The detailed syllabus proposed for 1 Year Fellowship / PDCC in Cosmetic Gynecology is as follows:

Topic	Number of Durat Lectures (week		Practical Goals for Fellow
Part 1 - Introduction to	11	6	
Cosmetic Gynecology			
Introduction to Cosmetic	1	MOTAL TO SECOND	
Gynecology & an overview of			
procedures			
History & evolution of Cosmetic	1		3.0
Gynecology			
Anatomy of External Genitalia & vagina	1		Develop comprehensive understanding of
			the anatomical structures of external
			genitalia and vagina for accurate diagnosis
Consultation & patient	1		surgical planning & procedure execution
selection			
Medical photography	1		To master the art of capturing accurate,
			informative and aesthetically pleasing
			photographs for documentation, patient
			communication, research
Consent	1		,
Anaesthesia in Cosmetic	1		
Gynecology			
Instruments	_ 1		
Suture Materials	2		
Aesthetic Gynecology: fast	1		
growing market and demand from patients			
nom patients		Det.	Sort and Con-
Part 2 - Female Sexuality		ment Exan	1#1
Human Sexual Response	14	8	
Female Sexual Dysfunction	2	2	West Control
Introduction	12	6	
	1		
History taking in a case of FSD	1		
Assessment & Scoring systems	1		ilon and
in a case of FSD	1		
Hypoactive Sexual Desire	2		
Disorder	2		
emale Arousal Disorder	2		
emale Orgasm Disorder	2		
	2		
Sexual Pain Disorder including	3		
/aginismus			

	Ass	essment E	xam #2
Part 3 - Surgical Cosmetic Gynecology	35	15	
Labia Complex	7	4	
Anatomy of labia minora &	1		
majora			
Labia Minora Hypertrophy and Classification Systems	1		
Different techniques of labia minoraplasty	2	1	To assist/ perform under supervision 10 labia minoraplasty procedures
Selecting the correct labia minoraplasty procedure	1		table minoraptasty procedures
Labia Majoraplasty	1		To assist/ perform under supervision 3
Anterior & Posterior Commisuroplasty	1	1	To assist/ perform under supervision 2 procedures
Clitoral Complex	5	2	procedures
Anatomy of clitoris	1	-	
Clitoral Hood Reduction	1	1	To assist/ perform under supervision 3 clitoral hood reduction procedures
Clitoroplasty	2		To assist/ perform under supervision 1 clitoroplasty procedure
Other procedures on Clitoris	1	2	To assist/ perform under supervision
Prepucioplasty Frenuloplasty Clitoral subdermal hoodplasty			atleast one procedure out of each of the rare procedures on clitoris
Hydrodissection with reverse V blasty			4. 77. 04. 70
	Asses	ssment Exa	am #3
urgical Vaginal Rejuvenation	2	1	To assist/ perform under supervision 10 surgical vaginal rejuvenation procedures
1onsplasty	2	1	To assist/ perform under supervision 1 monsplasty procedure
bdominoplasty	2	1	Video demonstration on
posuction	2	1	abdominoplasty/liposuction
ymenoplasty	1	1	To assist/ perform under supervision 3 hymenoplasty procedure
	Asses	sment Exa	m #4
art 4 - Minimally Invasive	18	10	
osmetic Gynecology			tyri on a li
atelet Rich Plasma nots- O,P,V,G	4		To be able to prepare platelet rich plasma
at Grafting	2		To assist/ perform 10 shot procedures
	3		To be able to prepare and understand the use of different fat procedures
ulvovaginal fillers	3		To assist/ perform 10 vulvovaginal filler procedures
arboxytherapy	2		vitin (c)
esotherapy	2		· · · · · · · · · · · · · · · · · · ·
lvovaginal Threads	2		

Part 5 - Non-Invasive	12	6	
Cosmetic Gynecology			
Energy Based Devices	3		Perform 25 EBD procedures
Laser Physics	2		r enemi 20 EBB procedures
Lasers- CO2, Er:YAG, Diode	3		
Transcutaneous Temperature Controlled Radiofrequency	1		
HIFU	1		
Comparative Study between different Energy Based Devices	2		
	Asses	ssment Ex	am #6
Part 6 - Special Topics	6	3	
Vulvovaginal Bleaching	1		
Vaginal Relaxation Syndrome	2		
Genitourinary Syndrome of menopause	3		To understand and treat Genitourinary Syndrome of menopause
Part 7- Urogynaecology	4	2	
Evaluation of urinary incontinence	2		To develop proficiency in the evaluation and management (non-surgical and minimally invasive) options in urinary incontinence
Management of urinary	2		moontailering.

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#### **ANNEXURE "B"**

Profile for Program Director of 1 Year Fellowship / Post Doctoral Certificate Course in Cosmetic Gynecology

Name: Dr. Manvi Verma

#### Qualifications:

Name of Exam	Year of Passing	Class/Division	Institute/College & University
M.B.B.S	2014	First (70.73%)	Government Medical College, University of Jammu
M.D. (Obstetrics & Gynecology)	2018	NA	Government Medical College, University of Jammu
MRCOG- Part 1	2018	NA	Royal College of Obstetricians & Gynecologists, London, UK
DNB (Obstetrics & Gynecology)	2020	First (57.71%)	National Board of Examinations, New Delhi
M.Ch. (Cosmetic Gynecology)	2022	NA	All India Institute of Medical Sciences, Rishikesh, Uttarakhand

# **Certifications / Training Courses Completed**

Name of Course  NPTL Research Methodology  Course for Medical Teachers	Dates Attended	<b>Passed</b> YES	Place Where Course Attended MGM Institute of Medical Sciences, Navi Mumbai
Comprehensive course in Structural Fat Grafting	01-02 September 2022	YES	The Cosmetic Surgery & Skin Institute, Mumbai
IARC accredited Fundamentals of Respiratory Care in COVID- 19	3-4 July 2021	YES	Advanced Centre of Continuous Professional Development, AIIMS Rishikesh
Research Methodology Course	December 2020 - January 2021	YES	Advanced Centre of Continuous Professional Development, AIIMS Rishikesh
Clinical Photography, Videography & Editing	03-04 February 2020 & 28-29 August 2020	YES	Advanced Centre of Continuous Professional Development, AIIMS Rishikesh
Initial Trauma Management Course	22-23 November 2016	YES	Guest House, GMC Jammu

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Continues

#### **Experience:**

<b>S.No.</b> 1.	Institution	Post	From	То
	Government Medical College Jammu	Intern	16.11.2013	15.11.2014
2.	Government Medical College Jammu	Junior resident in the Department of Obstetrics & Gynecology, SMGS Hospital	18.05.2015	24.05.2018
3.	Padmshree D.Y. Patil University and School of Medicine, Navi Mumbai	Senior Resident in Department of Obstetrics & Gynecology	07.07.2018	17.02.2019
4.	Acharya Shri Chander College of Medical Sciences, Jammu	Senior Resident in Department of Obstetrics & Gynecology	18.02.2019	21.05.2019
5.	All India Institute of Medical Sciences, Rishikesh	Senior Resident in Department of Obstetrics & Gynecology (Division of Cosmetic Gynecology)	27.05.2019	30.06.2022
6.	MGM Medical College & Hospital, Kamothe, Navi Mumbai	Senior Resident in Department of Obstetrics & Gynecology	22.08.2022	30.09.2022
7.	MGM Medical College & Hospital, Kamothe, Navi Mumbai	Assistant Professor in Department of Obstetrics & Gynecology	01.10.2022	Till date

- Dr. Manvi Verma is the <u>country's first M.Ch Cosmetic Gynecologist</u> who had received her 3 years post-doctoral training in the super specialty subject at India's premier institute AIIMS, Rishikesh.
- She is Faculty for Cosmetic Gynecology in many National and International Conferences and also Resource Person for various workshops in Cosmetic Gynecology, Female Sexual / Intimate Health, Medical Photography, etc.

#### **Publications:**

- Research Papers: 11 papers in indexed journal
- Text Book Chapters: 1 Chapter in print (Textbook in Cosmetic Gynecology)
- In Progress Work: 5 chapters in progress for an international textbook in Cosmetic Gynecology & Regenerative Medicine.

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Clinical Trial: Protocol prepared. IEC approval pending.

#### References:

- Dr. Mohan Thomas, The Cosmetic Surgery & Skin Institute, Mumbai
- Dr. Sunil Sharma, Professor & Head, Department of Obstetrics & Gynecology, MGM College & Hospital, Kamothe, Navi Mumbai.
- Dr. Sushil Kumar, Professor Emeritus, Department of Obstetrics & Gynecology, MGM College & Hospital, Kamothe, Navi Mumbai.

# Postgraduate Students Appraisal Form Pre / Para / Clinical Disciplines

Sr. No.	PARTICULARS	Not Satisfactory	Satisfactory	More Than Satisfactory	Remarks
		123	456	789	
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	OU	110	100	
6.	Thesis / Research work			4/1/	
7.	Log Book Maintenance			4	
VA	lications arks*				Yes/N

SIGNATUREOF ASSESSEE

student is strongly recommended.

Name of the Department/Unit

Name of the PGS tudent

SIGNATUREOF CONSULTANT

\*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

SIGNATURE OFHOD

#### **VISION**

By the year 2025, it is our constant endeavor in the Department of Obstetrics and Gynecology at M.G.M. Kalamboli to provide a state of the art department where knowledge and skills are taught to undergraduate and postgraduate students so that the department will be one among the best in India. Our department shall provide quality healthcare services to all and shall be the final referral center for all professionals and all sections of the society. It will be our duty to include these values in every activity we undertake and inspire all the medical students and professionals to do the same.

#### **COURSE OUTCOME**

To prepare the medical graduate and arm them with adequate knowledge and basic skills so as to provide a basic level of Antenatal, Postnatal and Family Welfare Care, to identify any High Risk Pregnancies and to be able to diagnose common Gynecological Problems and encourage them to screen for cervical cancer.

To prepare the post-graduate students so that they are able to give quality services in all areas of Obstetrics and Gynecology, make them aware of sub-specialty fields and encourage academic and research work. To impart knowledge in the field of health sciences through meaningful and ethical research and to integrate quality research with healthcare for society.

# **Annexure-41 of AC-46/2023**

#### Annexure 1

- We have started American Heart Association (AHA) course for Adult Basic Life Support (BLS)& Advanced Cardiac Life Support (ACLS)
- PG students from all departments have Casuality, ICU ,SICU posting where they need basic life saving skills like BLS ACLS & high quality CPR
- We want all PG students should be enrolled for the same course. (Two Days Workshop)
- AHA BLS & ACLS courses provides Hands on instruction & simulated cases.
- It will enhance skills of our PG students in the recognition & intervention of cardiopulmonary arrest, immediate post cardiac arrest, acute arrythmias, stroke & acute coronary syndrome



# MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

Sector-01, Kamothe, Navi Mumbai - 410209 Tel 022-27432471, 022-27432994, Fax 022-27431094

E-mail- registrar@mgmuhs.com Website : www.mgmuhs.com

