DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY KGMU, LUCKNOW----PG Curriculum

PREAMBLE

The aim of Post graduation programme in Obstetrics & Gynaecology is to produce doctors who will contribute to improving health of women in India and reducing maternal and preinatal mortality and morbidity, which is the need of the hour.A postgraduate student in Dept. of Obstetrics & Gynaecology must have knowledge of anatomy, physiology, pharmacology and pathophysiology related to reproductive system. Thorough knowledge of physiology of normal pregnancy and its management & diagnosis and management of abnormal pregnancy is essential. Basic neonatal care should be learnt. The curriculum of Department of Obstetrics & Gynaecology has been revised keeping in mind the recent advances & need felt in the field of Obstetrics & Gynaecology

1.Specific Learning Objectives/outcomes

At the end of the MD/MS Course in Obstetrics & Gynaecology, the student should be able to:

- a) Provide quality care to the community in the Antenatal, Intra-natal and Post-natal period of normal and abnormal pregnancies.
- b) Identify pregnancies at high risk and be able to triage and take decision for referral.
- c) Diagnose and manage common Obstetrical emergencies.
- d) Manage common gynecological problems and emergencies.
- e) Develop adequate surgical skills to manage common obstetrical & gynaecological problems.
- f) Be proficient in counseling for Family Welfare options.
- g) Provide contraception as per requirement and perform MTP.
- h) Have knowledge and be able to implement 'National Health Programs" pertaining to Women's Health.
- i) Be well versed with preventive aspects in Obstetrics & Gynaecology.
- j) Properly maintain medical records and know the Medico legal aspects and acts in respect of Obstetrical & Gynaecological practice.
- k) Keep abreast with advances in the field of Obstetrics & Gynaecology.

- 1) Plan and carry our scientific research (clinical/experimental) in speciality of Obstetrics & Gynaecology.
- m) Be familiar with modern methods of teaching.
- n) Be involved in educational program in Obstetrics & Gynaecology (with seniors) for medical and paramedical staff and also for the society.
- o) Develop communication skills and demonstrate compassionate attitude towards the patients.
- p) Be professional in his attitude towards patients & colleagues.
- q) Recognize importance of team work & work as team member or leader as the situation demands.

2.Syllabus

Module -1

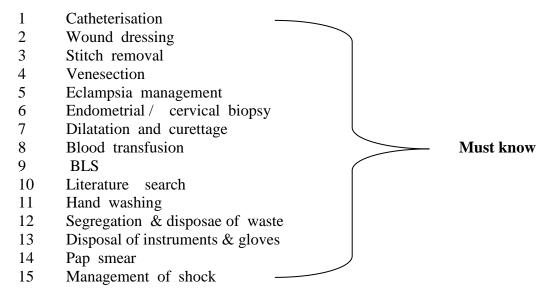
Basic clinical and surgical skills, clinical data management, ethical issues and research

Topics:-

1 Effective verbal and non verbal communication with patients and their family, as well as peer, senior & junior colleague and other hospital staff.

- 2 History taking in Obst. & Gynae cases.
- 3 Clinical examination of Obst. & Gynae.
- 4 Investigations required for common conditions in Obst. & Gynae. Cases. eg –Normal pregnancy, low risk preoperative Gynae patient.
- 5 Infection prevention .
- 6 Principal of wound healing, abdominal incisions, suturing
- 7 Common procedures-catheterization, dressing, stitch removal.
- 8 Preoperative and postop care for common Obst. Gynae. Cases (uncomplicated)
- 9 Management of fluid, electrolyte, blood and blood products.
- 10 Management of shock, allergy
- 11 Clinical note writing, discharge ticket writing, post operative note writing, data entry in departmental Records
- 12 Consent taking, Rights of the patient, patient confidentiality, counseling(
- 13 Basics of clinical research-type of studies, research designs, audit, guidelines and Protocols.

Skills-



MODULE - 2

Antenatal Care

Topics

- Sign, symptoms and d/d of pregnancy, confirmation of pregnancy.Various definition and terminology in Obstetrics and their significances (LMP, EDD, Parity, Gravida, Term, Preterm, Postterm, IUGR, LBW etc.). (Must know)
- 2. Examination of a pregnant woman and Antenatal care. (Must know)
- 3. Nutrition during pregnancy and Drugs in pregnancy. (Must know)
- 4. Fetal monitoring. (Must know)
- **5.** Importance of Genetics in Clinical Obstetrics. (**Desirable to know**)

Skills-

 Abdominal general systemic & P/S & P/V examination in Obstetric patient (Must know)
 NST (Must know)
 Basic antenatal USG (Must know)

MODULE - 3

Normal labor & delivery Management

Topics

- 1. Management of 1^{st} and 2^{nd} stage of labour.
- 2. Physiology and management of 3rd stage of labour and prophylaxis of PPH.
- 3. Neonatal resuscitation and management of new born .
- 4. Normal puerperium and breast feeding.
- 5. Puerperal sepsis and other Puerperal problems.
- 6. PPH & Primary management of shock.

1	Conduct AMTSL)
2	Conduct Normal Labour & delivery	
3	Episiotomy & its repair	Must know
4	Neonatal Resuscitation.	
5	Breast feeding	
6	PPH Management)

Common neonatal problems

Topics:

- 1. Birth trauma and other congenital malformations, perinatal mortality. Must know
- 2. Asphyxia neonatorum, Icterus neonatorum and Neonatal Infections.
- 3. Premature, dysmature and postmature babies.

Skills -

1 Neonatal resuscitation

- 2 Examination of newborn
- 3 Breast feeding Techniques

Early pregnancy complications

Topics:

- 1. Threatened, inevitable, incomplete & missed abortions
- Ectopic pregnancy types, pathophysiology & causes, management (medical, surgical & expectant)
- 3. Recurrent abortions including incompetent OS.
- 4. Septic abortion.
- 5. Vesicular mole.

Skills ;-

_ Suction evacuation MVA } Must know

<u>Contraception – MTP, Act</u>

Topics

- Family planning & contraception Overview, natural methods & barrier contraception.
- 2. Hormonal contraception and emergency contraception.
- 3. Intrauterine contraceptive devices
- 4. Postpartum contraception.
- 5. MTP Indications & MTP Act.
- 6. MTP methods (Medical & Surgical).
- 7. Tubal Ligation.

<u>Skills</u>

 Post Partum Contraception-counseling .
 Family Planning (oral, Injectable IUCD & Permanent methods), MTP (1st & 2nd Trimesters.—Counseling,
 LAM-counseling
 IUCD insertion including PPIUCD.
 Suction evacuation
 MVA
 Medical abortion

MODULE – 7

Common Surgical Skills, Clinical governance, Research

Topics:-

1 Data entry and management of the department data in different)
registers and computers.	
2 Data reporting of delivery, still births, maternal deaths,	
infections disease, Blood transfusions.	Must know
3 JSY form and form 16 of PCPNDT.	}
4 Audit - clinical, mortality, (perinatal and maternal) Caesarean,	
near miss, journal club.	
5 High risk consent, breaking bad news, patient -Doctor)
relationship.	
Skills :- 1 Gen-Opening & closing of abdomen	
2 Resuturing of episiotomy & abdominal wound.	Must know
3 PPH management skills, NASG,	
4 Postpartum sterilization / minilap tubal ligation/ MTP	
5 ACLS, ATLS (Desirable to know)	

6 Operations for utero-vaginal prolapse . (Must know)

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Anatomy, Physiology, embryology, development of genital tract, placenta, <u>amniotic fluid</u>

Topics

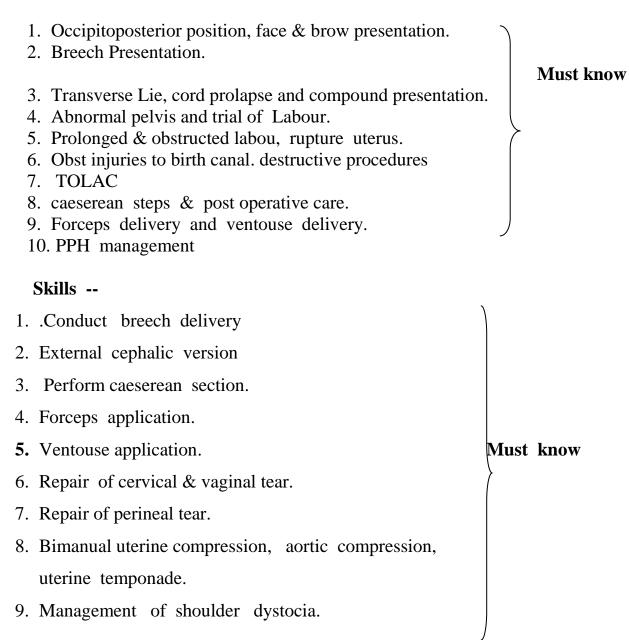
- 1. Anatomy of female genital tract (External and Internal genitalia).
- 2. Physiology of menstruation and abnormal menstruation including dysmenorrhoea.
- 3. Physiology of ovulation, fertilization and implantation.
- 4. Development of female genital organs and their anomalies.
- 5. Conception, implantation, development of placenta and establishment of fetomaternal circulation.
- 6. Placenta and amniotic fluid structure, function and abnormalities.
- 7. Fetal growth, development and fetal circulation.
- 8. Maternal changes during pregnancy.
- 9. Anatomy of female pelvis and fetus.
- 10.Physiology and mechanism of normal labour.

<u>Skills-</u>

1 clinical pelvimetry. (Must know)

Abnormal labor & its Management

Topics



High risk pregnancy & Medical diseases during pregnancy

Topics

1. Placenta previa.	
2. Accidental haemorrhage.	
3. Preterm labor & P PROM .	
4. Post dated pregnancy and Induction of labor.	
5. Fetal distress & meconium stained liquor .	
6. Hypertensive disorders of pregnancy.	
7. Eclampsia.	Must know
8. Pregnancy with anemia.	
9. Pregnancy with diabetes .Pregnancy with heart disease.	\geq
10.Pregnancy with Rh incompatibility.	
11.FGR (Fetal Growth Restriction).	
12.Multiple pregnancy.	
13.Hydramnios & oligohydramnios.	
 14.Pregnancy with infections (Hepatitis, Malaria, Tuberculosis, Chicken pox, Resp. tract infections, UTI) 15. Preg. with Thyroid disorder, Preg. with Obesity, Preg. with Seizure disorders, Preg. with renal disease. 16.Pregnancy with HIV infection. 	
<u>Skills</u>	
1. Amnio infusion -(Desirable to know)	
2. Intra uterine transfusion -(Nice to know)	
3. Doppler -MCA,PSV measurement. –(Nice to know)	
4. Detailed Obstractic ANC USG with Doppler. (Desirable	e to know)
5. Amnio centes	
6. CVS Nice to know	

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Infections of Genital tract – STI, TB, RTI

Topics

- 1. Normal & abnormal vaginal discharge, cervicitis & cervical ectopy.
- 2. Reproductive and Sexually transmitted infections.
- 3. Genital tuberculosis.
- 4. Pelvic inflammatory disease.

Skills

- 1. Vaginal smear
- 2. Amsel's criteria
- 3 Bartholin abscess drainage
- 4 Culdocentesis
- 5 Colpotomy.

Must know

Benign Gynecological problems

Topics:

- 1. Adolescence & its common problems.
- 2. Fibromyoma uterus.
- 3. Endometriosis & adenomyosis.
- 4. Cervical cancer screening programme & colposcopy, CIN and its management
- 5. Benign ovarian neoplasms I.
- 6. Benign diseases of vagina.
- 7. Benign diseases of vulva.
- 8. Menopause problem & management.
- 9. Primary amenorrhoea, secondary amenorrhoea and intersex.
- 10. Abnormal uterine bleeding, diagnosis and management of AUB.
- 11. PCOS

Skills:-

- 1 VIA/VILI
- 2 Colposcopy
- 3 Cryocautery
- 4 LEEP
- 5 Hymenectomy
- 6 Hysteroscopy
- 7 Basic Laparoscopy skills
- 8 Gynae USG
- 9 Ovarian cystectomy.

Must know

Gynecological Cancers—Common Cancers

Topics

- 1. Cancer cervix- sign/symptoms & diagnosis and management (Must Know)
- 2. Malignant ovarian neoplasms . (Must Know)

<u>Skills --</u>

- 1 FNAC (Must know)
- 2 Trucut biopsy (Must know)
- **3** Paracentesis (Must know)
- 4 Wertheims hysterectomy (Nice to know)
- 5 Staging Laparotomy (Nice to know)

Infertility- Basic

Topics

- 1. Workup of an infertile couple.
- 2. Female infertility-causes and management
- 3. Male infertility.- general overview

<u>Skills</u>:

- 1 Follicular monitoring.
- 2 Semen analysis & preparation
- 3 Sono salpingography
- 4 Hystero salpingography
- 5 IUI
- 6 PCT
- 7 Diagnostic laparoscopy & chromopertubation.

<u>National Programmes & Social Obstetrics Best practices & National</u> <u>Guidlines</u>

Topics

- Evidence based best practices in Obst & Gynae

 (e.g. episiotomy, anemia, partogram, antibiotics in labor).

 National and state level programs in MCH.

 (National Anemia Control Programme, RCH, NRHM and NUHM, Janani Suraksha Yojna, National Family Program).
- 3. Maternal & perinatal mortality.
- 4. National & international guidelines.
- Public awareness programmes related to adolescent health, menopause,GDM, cancer screening & prevention, contraception, anaemia, breast feeding.

<u>MODULE – 16</u>

Advanced Surgical skills, Ethical & Legal issues.

1 EBM (Desirable to know)	
2 Consumer forum, RTI.)
3 Ethical issues related to(1) sexual offence (2) Infer	tility
management, consent taking for donor semen/ Oocyte /	Must know
Surrogacy / research	J
Skills:-	-

1 Manual removal of placenta -(Must know) 2 Destructive obstetrics operations-(Desirable to know) PPH management - advanced skills-(B Lynch Cho & 3 other Uterine sutures) (Must Know) Molar evacuation 4 (Must know) Operation for ectopic pregnancy (Must know) 5 (Desirable to know) Myomectomy 6 Examination of rape victim. (Must know) 7 Abdominal hysterectomy /(Obstetric & Gynae) --(Must know) 8

Pelvic floor problems & Urogynecology

Nice to know

Topics

- 1. Prolapse uterus examination, diagnosis and management. –(Must know)
- 2. Vesicovaginalfistulae.
- 3. Rectovaginal Fistula. **Desirable to know**
- 4. Urinary in continence

<u>Skills</u>

- 1. Management of decubitus ulcer before prolapse Surgery.>
- 2. POPQ
- 3. Swab test
- 4. Cystoscopy
- 5. Operation for urinary incontinence
- 6. Repair of genital fistulas
- 7. Repair of complete perineal tear.
- 8. Vaginal hysterectomy **Must know**
- 9. Vaginal reconstructive surgery.- Desirable to know

Gynaecological Cancers—Others

Topics

- 1 Cancer endometrium
- 2 Gest ational trophoblastic neoplasia
- 3 Malignant ovarian neoplasms.
- 4 Malignant diseases of vagina
- 5 Malignant diseases of vulva

<u>Skills</u>

- <u>1</u> Treatment planning (Must know)
- 1 Administering chemotherapy.
- 2 Vulvectomy

Desirable to know

Infertility- Advanced

Topics:

1	ART	
2	Endocrinology & genetics.	Nice to know
Skills		<u>_</u>
1	IVF	
2	Tubal microsurgery	
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Contraception Revision

Topics:

- 1 Preconception and prenatal diagnosis & counseling.
- 2 PCPND Act.

<u>Skills</u>

- 1 Laparoscopic Ligation
- 2 Mini lap

Modules for PG Teaching in Obstetrics & Gynaecology

<u>Ist year</u>

- Module 1 Clinical basic, clinical data management, professionalism, ATCOM.
- Module 2 Antenatal care
- Module 3 Normal labour, delivery and management, Normal and abnormal Puerperium
- Module 4 Common neonatal problems
- Module 5 Early pregnancy complications
- ▶ Module 6 Contraception and MTP

II nd year

- Module 7 Common Surgical skills, Clinical governance, research
- Module 8 Anatomy, physiology, embryology, development of genital tract, placenta, amniotic fluid
- Module 9 -Abnormal labour and its management, Management of delivery (vaginal and instrumental delivery and caesarean section) -
- Module 10 High risk pregnancy and medical diseases during pregnancy
- Module 11 -Infection of genital tract STI,TB,RTI
- Module 12 -Benign Gynaecological problems
- ➢ Module 13- Gynaecological cancers—Common cancers (CaCx Ovary)
- Module 14 Infertility ---Basic Infertility
- Module 15 -National programme, best practice & National guidelines, social Obstetrics

IIIrd year

- Module 16 Advanced surgical skills, Ethical & legal issues, paper writing
- Module 17 -Pelvic floor problems ,Urogynaecology
- Module 18- Gynaecological cancers ---Others(Ca Endo, GTN, Vagina, Vulva)
- Module 19 Infertility----Advanced
- ➢ Module 20-- Contraception—revision

Operations MUST BE DONE / OBSERVED during PG Residency and Log Book maintained

Obstetrics

- 1. Conduct normal deliveries
- 2. Episopptpmy and its repair
- 3. Cervical and vaginal tear repair
- 4. Electronic fetal monitoring
- 5. Application of forceps and ventouse (10)
- 6. Assisted breech delivery (10 must be done)
- 7. Manual removl of placenta
- 8. Amnioinfusion, Amniocentesis (therapeutic)
- 9. Managemwent of genital tract obstetrical injuries
- 10. Post partum sterilization/minilap tubal ligation (20 must be done)
- 11. Medical termination of pregnancy- various methods (20 must be done)
- 12. Venesection
- 13. Culdocentesis
- 14. External Cephalic Version
- 15. Internal posalic version, Internal illac artery ligation
- 16. Caesarean Hysterectomy, Destructive obstetric operations

Gynaecology

- 1 Endometrial/cervical biopsy
- 2 Dilatation and curettage
- 3 Evacuation, suction
- 4 Culdocentesis, colpotomy
- 5 Wet smear, papsmear, VIA/VILI, hysterosalpingography.
- 6 Operations for utero-vaginal prolapsed
- 7 Ovarian cyst operation
- 8 Operation for ectopic pregnancy(2)
- 9 Vaginal and abdominal hysterectomy(5 must be done)
- 10 Basic Laparoscopic skills
- 11 Hysteroscopy
- 12 Laproscopic sterilization
 - PCT
 - Semen prep.
 - Follical monitoring
 - IUI
 - -IVF
 - IUCD insertion

SKILL FOR MD IN OBSTETRICS & GYNAECOLOGY----OBSTETRICS

final list

s.No	Procedure	Performed	Assisted	Observed	
1	Endometrial/ cervical biopsy				
2	Dilatation and curettage				
3	Electronic fetal monitoring				
4	Neonatal Resuscitation				
5	Eclampsia management				
6	Amnioinfusion				
7	Application of forceps & ventouse				
8	Cervical and vaginal tear				
9	Venesection				
10	Post partum sterilization / minilap tubal ligation				
10 (a)	Basic Obst. Gynae. UGS				
11	Medical termination of pregnancy/MVA/SE various methods				
12	Perineal tear				
13	Paracentesis				
14	LSCS				
15	Assisted breech delivery				
16	Manual removal of placenta				
17	Culdocentesis				
18	External Cephalic version				
19	Destructive obstyetrics operation				
20	PPH management skills,(NASG,Nimanual uterine compression, Aortic compression)				
21	PPH management –advanced skills-B Lynch, Uterine				
22	sutures, Advanced Obst. & Gynae USG				
23	Doppler & SCAN				
24	Internal poalic version				
25	Internal illac artery ligation (Cadaver)				
26	Amniocentesis				

27	Caesarean Hysterectomy & repair of rupture uterus							
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SKILL FOR MD IN OBSTETRICS & GYNAECOLOGY----GYNAECOLOGY

S.No	Procedure	Performed Assisted		Observed		
1	Endometrial /cervical biopsy					
2	Dilation and curettage					
3	VIA/VILI					
4	Molar pap smear					
5	Colposcopy					
6	Hysterosalpingography/SSG					
6 a	IUCD including PPIUCD					
7	PCT,Wet smear					
8	Semen preparation					
9	Follicle monitoring					
10	IUI					
11	Cryotherapy					
11a	LEEP					
12	Culdocentesis, colpotomy					
12 a	Perineal tear					
13	Operations for utero-vaginal prolapsed					
13 a	Bartholine cyst excision abscess drainage					
14	Basic Laproscopic skills (skill Lab)					
15	Hysteroscopy					
16	Laproscopic sterilization					
17	Ovarian cyst operation					
18	Operation for ectopic pregnancy					
19	Repair of genital fistulae					
20	Myomectomy					
21	Diagnostic & operative Laproscopic surgery					
22	IVF					
23	Vaginal Hysterectomy					
24	Vaginal reconstructive surgery					
25	Tubal microsurgery					
26	Radical operation for cervical malignancy					
27	Operation for Urinary incontinence					
28	Cystoscopy					
29	Exam of rape victim					

SKILLS FOR PG IN OBSTETRICS & GYNAECOLOGY----Ist Year

- 1 Catheterisation
- 2 Wound dressing
- 3 Stitch removal
- 4 Venesection
- 5 Eclampsia management
- 6 Endometrial / cervical biopsy
- 7 Dilatation and curettage
- 8 Blood transfusion
- 9 BLS
- 10 Literature search
- 11 Hand washing
- 12 Segregation & disposae of waste
- 13 Disposal of instruments & gloves
- 14 Pap smear
- 15 Management of shock
- 16 Abdominal general systemic & P/S & P/V examination in Obstetric patient
- 17 NST
- 18 Basic antenatal USG
- 19 Conduct AMTSL
- 20 Conduct Normal Labour & delivery
- 21 Episiotomy & its repair
- 22 Neonatal Resuscitation.
- 23 Breast feeding
- 24 PPH Management
- 25 Neonatal resuscitation
- 26 Examination of newborn
- 27 Breast feeding Techniques
- 28. Post Partum Contraception-counseling.
- 29 Family Planning (oral, Injectable IUCD & Permanent methods), MTP (1st & 2nd Trimesters.—Counseling,
- 30 LAM-counseling
- 31 IUCD insertion including PPIUCD.
- 32 Suction evacuation
- 33 MVA
- 34 Medical abortion

SKILLS FOR PG IN OBSTETRICS & GYNAECOLOGY----IInd Year

- 1 Gen-Opening & closing of abdomen
- 2 Resuturing of episiotomy & abdominal wound.
- 3 PPH management skills, NASG,
- 4 Postpartum sterilization / minilap tubal ligation/ MTP
- 5 ACLS, ATLS
- 6 Operations for utero-vaginal prolapsed.

7 Clinical pelvimetry

- 8 Conduct breech delivery
- 9 External cephalic version
- 10 Perform caeserean section.
- 11 Forceps application.
- 12 Ventouse application.
- 13 Repair of cervical & vaginal tear.
- 14 Repair of perineal tear.
- 15 Bimanual uterine compression, aortic compression, uterine temponade.
- 16 Management of shoulder dystocia.
- 17 Amnio infusion
- 18 Intra uterine transfusion
- 19 Doppler -MCA,PSV measurement.
- 20 Detailed Obstractic ANC USG with Doppler.
- 21 Amnio centesis
- 22 CVS
- 23 Vaginal smear
- 24 . Amsel's criteria
- 25 Bartholin abscess drainage
- 26 Culdocentesis

- 27 Colpotomy.
- 28 VIA/VILI
- 29 Colposcopy
- 30 Cryocautery
- 31 LEEP
- 32 Hymenectomy
- 33 Hysteroscopy
- 34 Basic Laparoscopy skills
- 35 Gynae USG
- 36 Ovarian cystectomy
- 37 FNAC
- 38 Trucut biopsy
- 39 Paracentesis
- 40 Wertheims hysterectomy
- 41 Staging Laparotomy
- 42 Follicular monitoring.
- 43 Semen analysis & preparation
- 44 Sono salpingography
- 45 Hystero salpingography
- 46 IUI
- 47 PCT

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48 Diagnostic laparoscopy & chromopertubation

SKILLS FOR PG IN OBSTETRICS & GYNAECOLOGY----IIIrd Year

- 1 Management of decubitus ulcer before prolapse Surgery.
- 2 POPQ
- 3 Swab test
- 4 Cystoscopy
- 5 Operation for urinary incontinence
- 6 Repair of genital fistulas
- 7 Repair of complete perineal tear.
- 8 Vaginal hysterectomy
- 9 Vaginal reconstructive surgery.
- 10 Treatment planning
- 11 Administering chemotherapy.
- 12 Vulvectomy
- 13 IVF
- 14 Tubal microsurgery
- 15 Laproscopic Ligation
- 16 Mini lap

3. Teaching and Learning methods

Didactic lectures Case presentations Journal club Seminars Clinicopathology(CPC) meet Demonstrations Skill lab Training

4.Interdisciplinary Training

The Junior residents(2) will be posted in the following departments to facilitate interdisciplinary learning

Department of Trauma and Emergency Medicine : 1 month

Department of Pediatrics: 1 week

Department of Radiodiagnosis: 3 days

Department of Radiotherapy: 3 days

Department of Critical care medicine: 1 week

5. Assessment methods

Formative: Internal assessment

Using checklists [skill, counseling, history, examination, management, labor and delivery] for monthly assessment Written assessment every six monthly Feedback after each assessment

Summative: as per NMC Guidelines

Theory:4 papers

Paper 1: Basic sciences Paper 2: Obstetrics Paper 3: Gynecology Paper 4: Recent advances in obstetrics and gynecology

Practical: clinical cases: 2 long;4 short;2 ultrashort cases

Viva voce: specimens instruments Dummy and pelvis contraceptives skill demonstration