

REVISED CURRICULUM FOR MD.,(O&G) POST GRADUATES

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Introduction:

Obstetrics & Gynaecology is the branch of Medicine which deals with the health care of the woman. It is concerned with the physiological, psychological and pathological events of the reproductive and menopausal processes.

Obstetrics deals with all aspects of pregnancy, including: antenatal care, normal physiology, early pregnancy problems and other pathological events which occurs during pregnancy and labour. Obstetrics also involves the study of the fetus as an individual which is intimately related to the health of the mother.

Goals:

The goal of MD course in Obstetrics & Gynaecology is to produce a competent Obstetrician & Gynecologist who:

- 1. Recognizes the health needs of adolescents, females in reproductive age group & post menopausal females**
- 2. Is competent to manage the pathological states related to reproductive system with knowledge of Anatomy, Physiology, Pharmacology & Pathophysiology.**
- 3. Is aware of contemporary advances & developments in the field of maternal health & other related issues.**
- 4. Oriented to the principles of research methodology and epidemiology**

5.Acquired the basic skills in teaching of the Medical and Paramedical Professionals.

Aims and Objectives:

All Postgraduate students must have three basic components; knowledge, clinical skills and attitude in order to be enthusiastic and well motivated efficient future doctors. This will enables the students to proceed into either general practice or other specialities. One of the most important objectives of the care of the woman is the recognition of the pathological events during pregnancy, labour and the immediate postpartum.

At the end of the postgraduate training ,the student shall be able to

1. Recognize the importance of the concerned specialty in the context of the health needs of the community.
- 2.Practice the specialty concerned ethically
3. Demonstrate sufficient understanding of the basic science.
- 4.Demonstrate skills in documentation of prevention of individual case details as well as morbidity and mortality data relevant to the assigned situation.
- 5.Demonstrate empathy and humane approach towards patients and their families.
- 6.Developed skills as a self – directed learned, recognize continuing educational needs; select and use appropriate learning resources.
- 7.Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field situation.

4. Teaching Programme

Daily

OP days : 7.30 am – 12 Noon case discussion & disposal of Antenatal and Gynaec patients in the respective units.

Non Op days: Ward rounds & bed side discussion - in the respective units.

Op days 1.30pm-3pm ward rounds in the respective units & detailed examination & work up of the admitted cases

Weekly

Grand rounds –every Saturday by the professors & HOD

Clinical discussion once in a week – professors

Lecture classes once in a week – assistant professors

Symposium/Seminar – Once in two weeks

Monthly

Mortality & Morbidity Audit (Maternal & Perinatal) – last Friday

CME programmes

5. Syllabus

3.1. Theory

OBSTETRICS

MATERNAL ANATOMY

- **Anatomy of pelvis**
- **Gametogenesis fertilization, implantation and early development of embryo**
- **Development of placenta.**
- **Anatomy of fetus, fetal growth & development, fetal physiology & circulation**

TOPIC	MUST READ	DESIRABLE TO READ	GOOD TO READ
ANATOMY OF PELVIS	<p>Boundaries of Pelvis true pelvis or pelvis minor false pelvis or pelvis major</p> <p>Planes and diameters of Pelvis Planes Plane of great pelvic dimension Plane of least pelvic dimension Diameters Inlet AP Obstetric conjugate 10cm Diagonal conjugate 12cm Anatomical conjugate 11cm Transverse 13.5cm Oblique 13cm</p> <p><u>Midcavity</u> Plane of least pelvic dimension AP 11.5cm Transverse 10cm</p> <p><u>Outlet</u> AP 9.5 – 11.5cm Transverse 11cm Plane of greatest pelvic dimensions AP 12.5cm Transverse 12.75</p> <p><u>Types of Pelvis</u> Gynaecoid Android Anthropoid Platypelloid</p>	<p>Clinical significance of different types of pelvis</p> <p>Android- failure of rotation and transverse arrest common</p> <p>Platypelloid- difficulty in engagement of the head Small gynaecoid- delay at every stage</p>	<p>Difference between male & female pelvis</p>

<p>EMBRYO GENESIS</p>	<p>Gametogenesis <u>Oogenesis</u></p> <p>Primary oocytes at birth – 2 million, At puberty 4 lakhs Final maturation – after fertilization</p> <p><u>Spermatogenesis</u></p> <p>Maturation of the sperm 61 days</p> <p><u>Ovulation</u> Time 14 days prior to the expected prior</p> <p>Ovulation occurs 24 to 36 hrs after LH surge fertilisation site – ampulla of fallopian tube life span of ovum 12- 24 hrs life span of sperm 48 -72 hrs Sex of the child – Sex chromosome by spermatozoon 2cell stage-30 hrs Morula -16 cell stage 96 hrs Blastocyst 5th day</p> <p><u>Implantation</u> Site- fundus of the uterus on 6thday</p> <p><u>Trophoblast</u> Cytotrophoblast and syncytio trophoblast</p> <p><u>Decidua Formation</u></p> <p>Decidua basalis decidua capsularis decidua parietalis</p> <p><u>Chorion and chorionic villi</u> Chorion and amnion</p> <p>Syncytiotrophoblast produces primary stemvilli</p>	<p>Structure of a mature ovum</p> <p>Structure of a mature spermatazoan</p> <p>Causes Mechanism and effects</p> <p>Biology of Trophoblast</p>	
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	<p>surrounded by intervillous spaces Secondary villi – 16th day Tertiary villi -21st day Villi over the deciduas basalis -> chorion frondosum -> placenta <u>Inner cell Mass</u> Bilaminar germ disc(8th day) connected to trophoblast by body stalk -> forms the umbilical cord Yolksac and amniotic cavity on each side of the germ disc Trilaminar germ disc (14th day) Extra embryonic coelom obliterates Yolksac forms gut</p>		
DEVELOPMENT OF PLACENTA	<p><u>Structure of placenta</u> Amniotic Membrane Chorionic plate Basal Plate Intervillous space Stem villi <u>Placental circulation</u> Utero Placental circulation – volume of blood 500ml, 350ml in the villi and 150ml in the intervillous space Placental Membrane (barrier) – no mixing of maternal and fetal blood. Fetoplacental circulation - two umbilical arteries and one umbilical vein <u>Function of Placenta</u> Transfer of nutrients Production and metabolisam of Hormones Barrier function Immunological function</p>	<p>Haemodynamics of fetal circulation Meternal regulation of Trophoblast Invasion and Vascular growth Immunological consideration of the fetal maternal interface</p>	<p>Placental Harmones Chorionic ACTH, Relaxin, PTH-Rp, Growth Hormone Variant (hGH-V) Gn RH, CRH, GHRH Leptin, Neuropeptide Y, Inhibin and Activin</p>

<p>FETAL GROWTH DEVELOPMENT</p>	<p><u>Events of Fetal Development</u> 14-21days – Notochord Neural plate 21-28days –Neural tube Cardiac chambers 4-6wks- Limb buds Optic vesicles 8-12wks-External Genitalia 28wks-Fetus viable 36wks-descend of one Testis 40wks-descend of both testicles</p>		
<p>FETAL PHYSIOLOGY</p>	<p><u>Fetal Nutrition</u> 3 stages Absorption Histotrophic transfer Haematotrophic <u>Fetal Haematopoiesis</u> Yolk sac -14th day Liver 10th week Bone marrow – term <u>Urinary system</u> Urine production 650ml / day –term <u>Skin</u> Lanugo-16th week Sebaceous glands-20th week <u>Gastro-intestinal Tract</u> Meconium 20th week <u>Respiratory System</u> Breathing movements 11th week Surfactant 24th week <u>Endocrine system</u> Fetal insulin 12th week Prolactin ,TSH, GH, ACTH, -10th week</p> <p>Umbilical vein- Oxygenated blood from the placenta Two umbilical arteries – deoxygenated blood from the fetus to be placenta</p>	<p>Fetal Adrenal Gland Hormones</p>	<p>Ontogeny of the fetal immune Response</p>

FETAL CIRCULATION	<u>Changes in fetal circulation at birth</u> closure of Umbilical arteries – lateral umbilical ligaments & superior vesical arteries. Closure of umbilical vein – ligamentum teres Ductus venosus – ligamentum venosum Ductus arteriosus – 1 -3 mnths of birth Foramen ovale-1Year of birth		
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MATERNAL PHYSIOLOGY

Physiology of Pregnancy

- **Maternal changes during pregnancy**
- **Diagnosis of pregnancy**
- **Fetus in normal pregnancy**
- **Prenatal care**
- **Antepartum Fetal Surveillance**

Physiology of Labour and puerperium

- **Causation and stages of labour**
- **Mechanism of labour**
- **Conduct of normal labour**
- **Normal Puerperium**
- **Intrapartum surveillance**

Topic	Must Read	Desirable to Read	Good to read
MATERNAL CHANGES DURING PREGNANCY	<p><u>Changes in genital tract</u></p> <p>Uterus Nullipara / Term lgth 6.5cm/ 32cm Wt 70gms / 1 Kg Shape Pear/spherical</p> <p>Cervix Soft blue and decreased collagen and Hydroxyproline</p> <p>Ovaries 6-7wks -corpusluteum Secretes progesterone</p> <p>Vagina Acidic PH Increased vascularity</p> <p>Breast</p> <p>8weeks - primary areola 20weeks-secondary areola & Montgomery's follicles</p> <p><u>Hematological changes</u> Starts 6 weeks increases at 20 weeks Blood volume ^ 30% Plasma volume ^50% RBC volume^20% Fibrinogen increased</p> <p><u>Weight changes during Pregnancy</u> Wt gain approx. 12.5kg Ist trimester no gain From 20wks</p>	<p>Changes in the other systems</p> <p>Immunological functions</p>	

	<p>0.5kg/week</p> <p><u>Metabolic changes</u></p> <p>Carbohydrate metabolism</p> <p>Accelerated starvation state(low FBS & ^ Plasma FFA)</p> <p>Diabetogenic state</p> <p>Water metabolism</p> <p>Fluid retention – 6.5ltrs</p> <p>Iron Metabolism</p> <p>Increased Fe requirement</p> <p>Decreased iron after 24th week</p> <p><u>Cardiovascular system</u></p> <p>Apex- shifted to 4th ICS & to left by 3 cm</p> <p>S1- loud and split</p> <p>S3 75% due to rapid ventricular filling</p> <p>Systolic ejection murmur at base</p> <p>Cardiac output</p> <p>Pre Pregnancy- 4.5l/min</p> <p>20 wks-6l/min</p> <p>Term-5to5.5l/min</p> <p>Supine hypotension syndrome</p> <p><u>Respiratory system</u></p> <p>State of hyperventilation</p> <p>Increase in tidal volume</p> <p><u>Gastrointestinal system</u></p> <p>Delayed gastric emptying time</p> <p><u>Urinary system</u></p> <p>Increased GFR & renal blood flow</p> <p>Renal glycosuria</p>		
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<p>DIAGNOSIS OF PREGNANCY</p>	<p><u>Endocrine system</u> Increased bhCG at 6wks, peak 60th -80th day, reach a nadir by 20wks Thyroid Hormones Increased from 3rd - 6th wks Insulin Increased but resistant state</p> <p><u>First Trimester</u> amenorrhoea morning sickness hegar`s sign <u>second trimester</u> perception of fetal movements ballotment, fetal heart <u>Third Trimester</u> Painless uterine contractions <u>Pregnancy Test</u> Immunoassay-bhCG 2-3days after the missed period(0.2 – 1 IU/ml)adio immunoassay- 25thday of cycle (0.002 MIU/ml)</p> <p><u>Ultra sound</u> 5wks-Gest.sac & Yolk Sac 6wks- fetal pole 7wks- fetal heart 8-14wks – CRL Measurement -Dating scan <u>Calculation of EDD</u> LMP, date ofquickening, height of uterus, ultra sound (CRL – 8-14wks,BPD&FL-12-</p>		<p>Cord blood banking</p>
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<p>FETUS IN NORMAL PREGNANCY</p>	<p>20wks)</p> <p>Fetal Attitude Fetal lie Fetal presentation? <u>Fetal position</u> Diameters of the fetal skull</p>		
<p>PRENATAL CARE</p>	<p><u>Antenatal visit</u> General History Obstetrics History General Medical Examination <u>Obstetric Examination</u> Abdominal Palpation-fundal Grip Umbilical Grip Pelvic Grips Auscultation Vaginal Examination Lab tests Advice to the Mother</p>	<p>Recommendation for weight gain, Recommended dietary allowances Common concerns during pregnancy Immunisation</p>	<p>Preconceptional counseling Drugs in Pregnancy</p> <p>FDA classification Transfer of drugs</p>
<p>ANTEPARTUM FETAL SURVEILLANCE</p>	<p>Tests of Fetal Well-being : Fetal Movement count Fetal breathing Contraction stress test Non-stress test Amniotic fluid volume BioPhysical Profile Doppler Velocimetry</p>	<p>Role of Hormones in labour</p>	
<p>PHYSIOLOGY OF LABOUR AND PURPERIUM</p>	<p><u>Causation&stages of labour</u> Uterine action-Architecture of Myometrium& control of Uterine Action <u>Causation</u> Gapjunctions</p>	<p>Physiological and Biochemical Process regulating parturition</p>	<p>PRAMS</p>

<p>MECHANISM OF LABOUR</p>	<p>Cervical Ripening Uterine Distension <u>Stages</u> False & True labour Latent & Active phase 3 Stages Patern of cervical dilatation Cardinal movements Engagement, Descent Flexion Internal Rotation Extension Restitution External rotation Expulsion</p>	<p>Breast feeding policy</p>	<p>Drugs secreted in Milk</p>
<p>CONDUCT OF NORMAL LABOUR</p>	<p>Diagnosis of Labour Cervix-Dilatation & Effacement Station of the fetal head Uterine contraction <u>Management of Ist stage</u> Progress of Labour- Partogram <u>Management of IInd stage</u> Restricted Episiotomy <u>Management of IIIrd stage</u> AMTSL-Uterotonic, controlled cord traction, uterine massage</p>		
<p>INTRA PARTUM SURVEILLANCE</p>	<p><u>Fetal Surveillance</u> Fetal heart rate monitoring- Intermittent auscultation Fetal acid-base Measurement Admission test</p>		

NORMAL PURPERIUM	Acoustic & scalp stimulation test <u>Surveillance of Uterine activity</u> Changes in the Genital tract&other system Changes in the uterus-involution, lochia Lactation Colostrum Physiology of lactation Care of the Pureperium Ambulation, bowel & bladder care, Breast, perineal care Postpartum follow-up care		
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COMPLICATIONS OF PREGNANCY

- **Early pregnancy complication**
- **Anaemia in pregnancy**
- **Hypertensive disorders of pregnancy**
- **Antepartum hemorrhage**
- **Preterm labour**
- **Intrauterine growth restriction**
- **Prolonged pregnancy**
- **Multiple pregnancy**
- **Rhesus isoimmunisation**

Topic	Must Read	Desirable to Read	Good to read
EARLY PREGNANCY COMPLICATIONS	<u>Hyperemesis Gravidarum</u> Etiology Clinical course Management Abortion Etiology- Maternal & fetal Factors <u>Types of Abortion</u> Threatened,	Immunological factors Inherited Thrombophilias	Chromosomal abnormalities

	<p>Incomplete,Complete Missed,recurrent,septic abortion Recurrent abortion-incompetent cervix encirclage procedure Differential diagnosis Treatment <u>Ectopic Pregnancy</u> Types Risk factors Clinical features <u>Investigations</u> Serum bhCG ultrasound Management Medical- Methotrexate Surgical-Conventional & laparoscopy Salpingectomy &Conservative Abdominal Pregnancy Ovarian Pregnancy Cervical Pregnancy Cesarean scar pregnancy <u>Gestational Trophoblastic disease</u> Hydatidiform or Vesicular Mole Gestational Trophoblastic Neoplasia Risk Factors Clinical Features Diagnosis-Ultrasound& Serum hCG Treatment Follow-up</p>	<p>Algorithm for evaluation Expectant Management</p> <p>Staging and Prognostic scoring</p>	<p>Novel serum Markers VEGF,CA125,Creatine kinase</p> <p>Arterial Embolization</p> <p><u>Histological Diagnosis</u> Flow cytometry</p>
<p>ANAEMIA IN PREGNANCY</p>	<p><u>Hematological changes during pregnancy</u> Physiological anemia Plasma volume Increase 40-45% Red cell mass increase 15-20% <u>Causes</u> Iron deficiency</p>	<p>Stages of Erythropoeisis Iron Metabolism</p>	<p>Hemoglobinopathies Sickle-cell anaemia Thalassemia</p>

	<p>Folic acid & vitamin B12 deficiency Hemoglobinopathies Effects Investigations <u>Management</u> Prevention Treatment-iron therapy Oral & Parenteral Blood transfusion Management in Labour</p>		
<p>HYPERTENSIVE DISORDERS OF PREGNANCY</p>	<p><u>Classification</u> PIH- >20wks GA & <12wks of Postpartum Preeclampsia-Albuminuria Eclampsia Preeclampsia superimposed on chronic hypertension Chronic hypertension <u>Pathogenesis</u> Risk factors <u>Preeclampsia</u> Diagnosis <u>Investigations</u> Renal function test Liver function test Platelet count Optic fundus examn. <u>Management</u> Prevention-fishoil, calcium,Antioxidants, Lowdose Aspirin Mild –Rest,Diet, Monitoring, Delivery Severe-Anti-HT, Anti-convulsants Delivery <u>Eclampsia</u> Etiology Differential Diagnosis Complications <u>Management</u> General Management Control of convulsions</p>	<p>Immunological factors Abnormal Trophoblastic invasion Endothelial cell activation</p> <p><u>Predictive Test</u> Provocative Pressor test Uterine Artery Doppler Velocimetry Pulse Wave Analysis Microalbuminuria</p>	<p><u>Genetic factors</u> Candidate genes</p> <p><u>Endothelial Dysfunction and Oxidant stress-Related Tests</u></p> <p>Fibronectins Free fetal DNA VEGF&PIGF Lipid peroxides</p> <p>Plasma exchange Postpartum Angiopathy (Reversiblecerebral I Vasoconstriction syndrome)</p>

	<p>Mag.Sulphate regimen Control of hypertension Obstetric management <u>Chronic Hypertension</u> Differential Diagnosis & management <u>HELLP syndrome</u> Hemolysis Elevated Liver enzymes & Low Platelets</p>		
<p>ANTEPARTUM HEMORRHAGE</p>	<p><u>Abruptio placentae</u> Etiology <u>Types</u> Concealed, revealed, mixed Clinical features Differential Diagnosis Management Indications for LSCS <u>Causes for maternal mortality</u> Hypovolemic shock Renal failure Coagulopathy <u>Placenta previa</u> Etiology <u>Types</u> Clinical features Differential Diagnosis - USG <u>Management</u> Expectant & active line of management Indications for LSCS</p>	<p>Recurrent abruption</p> <p>Sheehan syndrome</p> <p>Couvellaire uterus</p>	
<p>PRETERM LABOUR</p>	<p>Etiology Pathogenesis <u>Management</u> Corticosteroids Tocolytics Preterm (PPROM) premature rupture of membranes <u>Diagnosis Management</u> Antibiotics corticosteroids</p>		<p>Rescue therapy Atosiban Nitric Oxide donors</p>

INTRAUTERINE GROWTH RESTRICTION	Definition Etiology Diagnosis Ultrasound- Fetal Biometry, AFI, doppler velocimetry Management Assessment of fetal growth, High protein diet Assessment of fetal wellbeing-daily FMC, NST, BPP	Gravidogram	
PROLONGED PREGNANCY	Etiology Diagnosis Management Antepartum fetal surveillance, FMC,NST,BPP Induction of labour		
MULTIPLE PREGNANCY	Incidence Varieties Presentations Course of Pregnancy Diagnosis Management of Labour	Acardiac Twin(TRAP) sequence Twin-Twin Transfusion Syndrom(TTTS)	Selective Redution
RHESUS ISOIMMUNISATION	Factors Influencing Rh immunization Detection of Fetomaternal Hemorrhage Identification of RH-immunized Pregnancy ICT Management of Rh-immunised Pregnancy Rh antibody assay Amniocentesis – Liley’s graph Ultrasound		

DISEASES COMPLICATING PREGNANCY

- Diseases of the Cardiovascular System
- Maternal Infections during Pregnancy
- Diabetes in Pregnancy
- Tumours of the Uterus and Adnexa
- Surgical Emergencies during Pregnancy
- Liver diseases in pregnancy
- Diseases of urinary system

Topic	Must Read	Desirable to Read	Good to read
<p>DISEASES OF THE CVS</p>	<p>CHANGES IN THE CVS SYSTEM Cardiac output^from 4.5l/min-6l/min TYPES-congenital &rheumatic FUNCTIONAL GRADING-NEWYORK HEART ASSOCIATION MANAGEMENT During pregnancy,labour& puerperium</p>		<p>Surgically corrected</p>
<p>MATERNAL INFECTIONS DURING PREGNANCY</p>	<p>TORCH INFECTIONS Effects,diagnosis& management SEXUALLY TRANSMITTED DISEASES Syphilis,gonorrhoea, HIV infection Screening,diagnosis, Management Elective LSCS HAARTherapy OTHER INFECTIONS Malaria,varicella Tuberculosis</p>		

<p>DIABETES IN PREGNANCY</p>	<p>WHITE'S CLASSIFICATION PATHOPHYSIOLOGY DIAGNOSIS Screening-OGCT 75g 2nd hr value-130mg% GTT RISK FACTORS MANAGEMENT Diet,insulin Obstetric manegmt Neonatal problems</p>	<p>HBA1C in GDM</p>	<p>Pregestational diabetes</p>
<p>TUMOURS COMLICATING PREGNANCY</p>	<p>FIBROIDS,OVARIAN TUMOURS & CARCINOMA CERVIX Effects &management</p>		
<p>SURGICAL EMERGENCIES</p>	<p>Acute appendicitis, Intestinal obstruction</p>		
<p>LIVER DISEASES</p>	<p>Intrahepatic cholestasis,viral hepatitis,HELLP syndrome</p>		
<p>DISEASE OF URINARY SYSTEM</p>	<p>Asymptomatic bacteriuria Acute renal failure</p>		

<p>ABNORMAL LABOUR</p>	<p>MALPRESENTATION Occipito posterior Course of labour&management Face presentation Breech presentation Varities,mechanism of labour, Management-ECV Brow presentation compound presentation DYSTOCIA Uterine dysfunction- partograph Precipitate labour Cervical dystocia</p> <p>CEPHALO PELVIC DISPROPORTION Examination- abdominal&vaginal examn Management of labour Elective LSCS,Trial of labour</p> <p>Shoulder dystocia Diagnosis& management</p>	<p>Cordio-Tocograph</p>	
<p>THIRD STAGE COMPLICATION</p>	<p>POST PARTUM HAEMORRHAGE ETIOLOGY Atonic &traumatic PREDISPOSING FACTORS MANAGAMENT-prophlactic-AMSTL Curative-blood transfusion,oxytocics & surgical mgmt RETAINED PLACENTA Placenta accrete Manual removal</p> <p>INVERSION OF UTERUS Diagnosis&management</p>	<p>B-Lynch suturing</p> <p>Internal iliac artery Ligation</p>	<p>Angiographic Embolization</p> <p>Pelvic Umbrella Pack</p>

<p>OBSTETRIC PROCEDURES</p>	<p>INJURIES TO THE PARTURIENT CANAL Vulval hematoma Perineal tears Cervical&vaginal laceration</p> <p>Rupture of the uterus Etiology Clinical features Management</p> <p>PUERPERAL INFECTION VENOUS COMPLICATIONS Deep vein thrombosis Thrombophlebitis GENTIAL TRACT INFECTIONS MASTITIS& BREAST ABSCESS</p> <p>FORCEPS Types Components Indications Prerequisites Technique of application VACUUM EXTRACTOR Indications Technique Advantages</p> <p>VERSION External cephalic version, internal podalic version Indications&technique CAESAREAN SECTION Indications Procedure Difficulties encountered Pregnancy following caesarian section Peripartum hysterectomy</p>		
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	<p>INDUCTION OF LABOUR Indications BISHOP'S score Methods Prostaglandins,oxytocin</p> <p>ULTRASOUND Early pregnancy-- Diagnosis,dating,viability, Multiple pregnancy,congenital anomalies Estimation of gest.age,fetal growth, fetal weight,liquor volume,fetal well being</p> <p>DOPPLER VELOCIMETRY</p>		
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Family Planning

- Demography and Population Dynamics
- Contraception
- Emergency Contraception
- Recent Advances in Contraception

Topic	Must Read	Desirable to Read	Good to read
DEMOGRAPHY AND POPULATION DYNAMICS	Population Dynamics Factors involved Magnitude of the Problem Impact of increased population		Vital events
CONTRACEPTION	Pearl index <u>Temporary Methods</u> <u>Barrier Methods-</u> Condoms, Diaphragm Chemical-Sponge(Today) Combination Natural Contraception IUCD Sterodial Contraceptions Oral-OCP ,triphasic combined pills,mini pill Parenteral—DMPA,NETO Implants-norplant1,2 ,Capronor Silastic vaginal rings Skin patches Centchroman Permanent—vasectomy, Tubectomy- laparotomy,minilap,laprascopy ,hysteroscopy,vaginal route		
EMERGENCY CONTRACEPTION	OCP,estrogen,levonorgesterol, Mifepristone,centchroman,GnRH agonist,prostaglandins		
MEDICAL TERMINATION OF PREGNANCY	MTP ACT Grounds for performing MTP		

<p>Recent advances, New development, Future research work in contraceptive technology.</p>	<p>Place for performing MTP Implications of MTP act Methods of MTP First trimester MTP Menstrual regulation Dilatation & suction evacuation MVA Medical methods- prostaglandin,mifepristone, Second trimester MTP Surgical methods Dilatation and evacuation,aspirotomy Medical methods Extraovular instillation of drugs Extra uterine methods Late sequelae of MTP Immunological methods HCG beta subunit Zona pellucida antibodies Antibodies to sperm antigen Anti FSH Male contraceptive Gossypol</p>		
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ETHICS IN OBSTETRICS & GYNAECOLOGY

PCPNDT Act – Preconceptional & perinatal diagnostic test act

MTP Act

Fetal Anomalies – Decision reg. termination or continuation

Multiple Pregnancy – decision Reg. fetal reduction

Modern O&G – Regarding ART – Ex. Removal of both ovaries for benign condition in the younger& Middle age group women do not warrant removal of a normal uterus – Details

Consent :

Consent forms for obstetric emergencies

Consent forms for sterilization ex. For Lap sterilization

A. Permanent sterility B. Failure, 1% of patients conceive after sterilization C. May be converted to open surgery in the presence of unexpected problems, Technical (or) Otherwise

For Planned procedures & Laprotomy if one is doing any procedure other than for which the consent was previously obtained the surgeon or the Assistants must explain and get the consent for present procedure during the Surgery itself.

Special Consent: Jehovahs witness , Mentally challenged , Unmarried , Medico legal cases

SUGGESTED BOOKS:

OBSTETRICS

SL.NO	Must Read	Desirable to Read	Good to read
1	MUDHALIAR& MENON'S book of obstetrics	JAMES High Risk Pregnancy	BRITISH JOURNAL of O&G
2.	WILLIAM'S Text book of Obstetrics	ARIAS High Risk Pregnancy	CLINICS OF NORTH AMERICA
3.	IAN DONALD Practice of Obstetrics	MICHAEL DE SWIET Medical Disorders in Pregnancy	ALL on NET
4.	RECENT ADVANCES IN O&G	Three authors for Post Graduates Dr.K.BASKAR RAO	
5.	STUDD- Progress in O&G	DUTTA'S Text book of Obstetrics	

SUGGESTED BOOKS:

GYNAECOLOGY & FAMILY PLANNING

SL.NO	Must Read	Desirable to Read	Good to read
1.	SHAW'S Text book of Gynaecology	SPHEROFF'S Text book of Endocrinology & Infertility	BRITISH JOURNAL of O&G
2.	SHAW'S Text book of Operative Gynaecology	NOVAK'S Text book of Gynaecology	CLINICS OF NORTH AMERICA
3.	DEWHURST'S Text book of Gynaecology	BONNEY'S Text book of Gynec Surgery	Journal on Fertility & Sterility
4.	JEFFCOAT'S Text book of Gynaecology	DUTTA'S Text book of Gynaecology	ALL on NET
5.	TE LINDES Operative Gynaecology		
6.	RECENT ADVANCES IN O&G		
7.	STUDD- Progress in O&G		
FAMILY PLANNING			
1.	Family Planning Practices by S.K.CHAUDHARY		Population reports

M.D. BRANCH –II- OBSTETRICS AND GYNAECOLOGY

Clinical Examination

Total Marks: 200

OBSTETRICS	No.of Cases	Marks
1.Long Case	One	50
2.Short Case	Two x 25	50

		100

GYNAECOLOGY	No.of Cases	Marks
1. Long Case	One	50
2.Short Case	Two x 25	50

		100

VIVA VOCE EXAMINATIONS

Total Marks:100

1.OSCE		50
2.Log Book (Evaluation & Questioning)		20
3.Orals on Recent Advances		30

	Total	100

1.OSCE(Objective Structural Clinical Examination)

Marks(10x5):50

Based on Objective Structured Exam Stations:

S.No	Stations	Marks
1.	Early Diagnosis of Pregnancy	05
2.	Abnormal Pregnancy	05
3.	Labour related Partogram	05
4.	Contraception	05
5.	Instruments	05
6.	Common Drugs	05
7.	Specimen	05
8.	Histopathology slides	05
9.	Radio Diagnosis (USG,CT,DOPPLER,X-ray)	05
10.	Latest Management –Obstetrics	05
		50

Note: Serial No: 1 to 10 should be common to all the candidates appearing on that day.

2. Log Book(Evaluation and Questioning) Marks 20

3.Oral and Recent Advances Marks 30

THESIS Marks:100

Note: Thesis will be sent to two external examiners evaluating for 50 marks each, who will be different from the examiners coming for the clinical Examinations.

The Last date for submitting the Thesis will be four months before the schedule date of Exam April 15th (i.e 31st December)

- If the Candidate has failed in the thesis, the examiners have to furnish their comments on the thesis and the rectification to be done in the thesis.
- The result of the candidate will be withheld.
- The candidate has to rectify the deficiencies pointed out by the examiners and resubmit the thesis to the University within 3 (three) Months.
- The resubmitted thesis will be sent to the 3rd examiner for their opinion. After the report received from the 3rd examiner the result for the P.G.Examination will be published.
- The Report on the Thesis evaluated alone be obtained from the Examiners and the Thesis evaluated is not required.

PASS

<u>Minimum for Pass:</u>	Clinical Exmination	VIVA	Thesis
Maximum	200	100	100
Minimum	100	50	50

Candidate must pass each component separately. Even if a candidate fails in one component, the candidate is deemed to fail in the whole examination.

GUIDE LINES

Each candidate should be examined by a minimum of One Internal and One External Examiner.

OBSTETRICS:

- . Long Case: (i) For examining the candidate by the examiners, a minimum of 30 minutes per candidate should be taken.]
(ii) 30 minutes for a student for examining long case and 10 minutes for writing case sheet)
- . Short case: (i) For examining the candidate by the examiners, a minimum of 10 minutes for each short case should be taken.
(ii) 10 minutes for examining each Short case.
(iii) No Case Sheet writing for Short Case.

GYNAECOLOGY:

- .Long Case: (i) For examining the candidate by the examiners, a minimum of 30 minutes per candidate should be taken.
(ii) 30 minutes for a student for examining long case and 10 minutes for writing case sheet)
- .Short Case: (i) For examining the candidate by the examiners, a minimum of 10 minutes for each short case should be taken
(ii) 10 minutes for examining each Short case.
(iii) No Case Sheet writing for Short Case.

Hand written Log Book: Hand Written Log Book must be presented to the examiners for evaluation and questioning.

Hand Written Log Book has to be maintained by the candidate throughout the 2 years of study. It has to be certified by the Head of the Department every year. Every quarterly it must be reviewed by the Unit Chief. Every month it should be checked by the Unit Assistant Professor.

GYNAECOLOGY

- **Anatomy & normal histology of Female genital tract**
- **Physiology of Ovulation & menstruation**
- **Development & malformations of Female generative organs**
- **Gynaecological diagnosis**
- **Paediatric and Adolescent Gynaecology**
- **Menopause and Post Menopausal bleeding**
- **Sexually transmitted diseases**
- **Pelvic inflammatory diseases**
- **Tuberculosis of female genital tract**
- **Diseases of Vulva and vagina**
- **Pathology of conception**
- **Diseases of Urinary system**
- **Gestational Trophoblastic diseases**
- **Disorders of Menstruations**
- **Menorrhage and dysfunctional uterine bleeding**
- **Genital Prolapse**
- **Fibromyoma of uterus**
- **Disorders of the Ovary**
- **Gynaecological Oncology**
- **Endometriosis**
- **Hormonal Therapy**
- **Endoscopic and imaging modalities**
- **Operative Gynaecology**

TOPIC	MUST READ	DISERABLE READ	GOOD TO READ
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TOPIC	MUST READ	DISERABLE READ	GOOD TO READ
ANATOMY	<p>Vulva-bartholins gland Vagina-3 sulci Relations Uterus – size 9x6.5x3.5cm Position Anteversion & Anteflexion 3 layers Perimetrium Myometrium Endometrium Fallopian tubes-parts function</p> <p>Ovaries – 3.5x2.5x1.8cm Ureter-course ,injuries Pelvic musculature-Pelvic Diaphragm</p> <p>Blood supply of genital organs Ovarian artery-branch of aorta Uterine artery - branch of anterior division of internal iliac artery Branches – arcuate, radial, spiral,&straight arteries Vaginal artery-vaginal branch of uterine artery Arteries of vulva&perineum</p>		
	<p>Lymphatic system Inguinal glands Parametrial glands External iliac glands Common iliac Sacral groups Lumbar group</p> <p>Nerves supply Sympathetic & para sympathetic</p>		
NORMAL HISTOLOGY	<p>Ovary – surface epitheliam</p> <p>Cortex-Primordial follicle Grafian Follicle Corpus luteum Endometrium Proliferative phase Secretary phase</p>		

	<p>Menstruation Vaginal epithelium-Physiological changes</p>		
<p>PHYSIOLOGY OF OVULATION & MENSTRUATION</p>	<p>Hypothalamus Pituitary-FSH ,LH, Prolactin, Oxytocin Ovary Estrogen-Actions Progesterone-Actions Physiology of ovulation-14days before 1st day of succeeding cycle <u>Physiology of Menstruation</u> Proliferative phase –estrogen Secretory phase-progesterone Pulsatile GnRH- secretion of FSH LH surge 24-36hrs before ovulation Peak estrogen-48hrs before ovulation Corpus Luteum –Progesterone secretion EM Secretory changes Fall in estrogen & progesterone -> menstruation <u>Menstruation</u> Interval 28days Duration 3-5days Blood loss-50-200ml</p>	<p>Hormonal levels in different phases of menstrual cycle</p> <p>Neuro endocrine control of Menstruation Role of prostaglandins</p>	
<p>DEVELOPMENT OF FEMALE GENERATIVE ORGANS</p>	<p>Urogenital Sinus & External Genital Organs Eight weeks-Intermediate cell mass & genital ridge <u>Primitive Urinary system</u> Pronephros, Mesonephros or Wolffian Body, Metanephros Pronephros disappears Wolffianbody>epoophoron,paroophoron & gartner’s duct Metanephros>kidney,ureter&pelvis 7th wk-Mullerian duct>uterus,fallopian tubes&upper2/3rd of vagina Primitive cloaca divided by urorectalseptum into urogenital sinus & rectum Urorectal septum>perineal body <u>Lower end of mullerian duct</u> Mullerian tubercle&sino vaginal bulb Sino vaginal bulb>lower1/3rd of vagina & hymen <u>External genital organs</u></p>		

	<p>Genital tubercle –clitoris Genital fold-labia majora Cloacal memb-labia minora DEVELOPMENT OF OVARY Undiff. Gonad till 5wks 6th wk-germ cells>primitive primordial follicles around 7 million; at birth -2 million;only 300 ovulate 10th wk- histology of adult ovary</p>		
<p>MALFORMAT IONS OF THE FEMALE GENERATIVE ORGANS</p>	<p>Development of the Female Generative Organs The Urogenital Sinus and the external Genital Organs Development of the Ovary Gonad Mullerian ducts Mullerian Anomalies Aplasia Hypoplasia Atresia Mullerian Duct Anomalies Clinical aspects Management Hermaphroditism and Pseudohermaphroditism Developmental Defects of the Urogenital Sinus Malformations of the Rectum and Anal Canal Imperforate anus Atresia recti Congenital rectovaginal fistula Wolffian Duct Anomalies Renal Tract Abnormalities</p>		
<p>GYNAECOLOGIC AL DIAGNOSIS</p>	<p>History taking Menstrual History Obstetric history Physical Examination General Examination Abdominal Examination <u>Gynaecological Examination</u> Examn in situ Speculum examination Papsmear/Hanging drop Vaginal Examination</p>		

	<p>Rectal Examination Investigations Preoperative Investigations (IVP, Tumour Markers, Bacterial Examination of genital tract- candida & trichomoniasis) <u>Special Tests</u> Hanging drop preparation Papanicolaou Test- classification (WHO/SIL Bethesda) Liquid based cytology Cytohormonal Evaluation (Karyopyknotic index (KPI)) Uterine Aspiration cytology Colposcopy Endometrial Biopsy Hormonal Assays Ultrasonography Others (CT, MRI, HSG) Gynaecological Endoscopy Aspiration of Pouch of Douglas Pregnancy test</p>		
<p>PAEDIATRIC AND ADOLESCENT GYNAECLOGY</p>	<p>Pediatric Gynecology Anatomy Physiology Neonate Congenital Anomalies Infection Tumors Puberty & Adolescent Problems Pubertal changes Management Precocious Puberty Delayed Puberty Oligomenorrhoea Puberty Menorrhagia Dysmenorrhoea Vaginal Discharge Acne Unwanted Pregnancy</p>	<p>Tanner & Marshal staging</p> <p>Neuro endocrinologic control of puberty</p>	

MENOPAUSE AND POST MENOPAUSAL BLEEDING	MENOPAUSE Definition Hormonal changes Anatomical changes Symptoms menstrual,neurological,genitourinary tract Investigations-PAPsmear Management Hormone replacement therapy-estrogen,progestogen,raloxifene;soya,bisphosphonates Post menopausal bleeding Definition,etiology,investigations-USG –EM thickness Fractinal curretage,endometrial sampling,hysteroscopic biopsy management	estrogen transdermal patch HRT and bone mineral density	
SEXUALLY TRANSMITTED DISEASES	Condylomata acuminata Genital ulcers,Genital Herpes,Chlamydia, syphilis,gonorrhoea,LGV,granuloma inguinale Human Immunodeficiency Virus.		
PELVIC INFLAMMATORY DISEASE	Etiology Pathological Anatomy Stages of PID Clinical criteria for diagnosis of PID Acute/chronic Signs & Symptoms Differential diagnosis Treatment Acute PID-Medical/Surgical/Minimal Invasive Surgery Chronic PID-Surgery Laposcopic/Hystroscopic/Conservative Surgery Prophylaxis Against PID Actinomyces PID	Tubeovarian mass CDC guidelines for treatment of PID	
TUBERCULOSIS OF GENITAL TRACT	Primary sources of infection ,mode of spread, Bacteriology ,Pathology, TB Fallopian tubes- Exosalphingitis{tobacco pouch		

	<p>appearance and Frozen pelvis} and endosalphingitis, Symptoms of TBgenital tract. Infertility,menstrual disorders,fistula formation.</p>		
<p>DISEASES OF VULVA AND VAGINA</p>	<p>VULVA Benign condition Atrophy Dystrophies- Histological classification and clinical features Cysts and neoplasms- Bartholins cyst</p> <p>Vagina Leucorrhoea Infections- Gonococcal,trichomonas,monilial, chlamydial,bacterial vaginosis Vaginitis- Senile vaginitis Secondary vaginitis Cysts Gartners cyst</p> <p>VULVAL INFECTIONS</p> <p>CLINICAL FEATURES,DIAGNOSIS &MANAGEMENT</p>		
<p>INFERTILITY</p>	<p>Issues involved <u>Male infertility</u> Spermatogenesis, Endocrine control, pathology, Etiology, <u>Investigations,</u> History, General & Local Examination, <u>Special investigations</u> Semen analysis hormone assay, testicular biopsy, Immunological test, Patency of vas, Chromosomal study <u>Management</u> Education, substances abuse, correct endocrinopathies, surgical, antibiotics, Hormones (HCG, Testosterone,GnRH,Sildenafil, artificial insemination)</p>		<p>Post coital test (sims or huhnur's test) Sperm penetration test</p>

	<p><u>Mng of azoospermia</u> IVF, GIFT, MAF, MESA, TESTICULAR BIOPSY <u>Psychological consideration.</u></p> <p>Female infertility Etiology <u>Investigations</u> History, examination, special investigations. Test for tubal patency,(HSG, Laparoscopic chromotubation, SSG) <u>Management of Tubal infertility</u> Tubal microsurgery(tuboplasty), Laparoscopic tubal adhesiolysis, fimbrioplasty, IVF <u>Test for Ovulation</u> BBT, endometrial biopsy, fern test , USG, Hormonal study <u>Management of anovulation</u> Ovulation induction drugs, GnRH, Prednisolone, lap, drilling. Management of Peritoneal disorder, Endometriosis, unexplained infertility</p>		<p>IVF TECHNIQUE (Indications, complications), GIFT,MAF,ICSI, Epididymal aspiration.</p> <p>Newer modalities Hysteroscopy, Falloscopy, ampullary and fimbrial salpingoscopy,</p> <p>ART (indications, types</p>
<p>DISEASES OF URINARY SYSTEM</p>	<p><u>Common Urinary Malfunctions</u> 1.Acute Retention of Urine Causes, Management 2.Chronic retention Causes, Management 3.Retention of Urine due to retroverted gravid uterus Management 4.Urethral Syndrome 5.Difficult Micturition 6.Painful Micturition 7.Increased Frequency of Micturition 8.Incontinence of Urine 9.Cystitis-Micro Organisms, Mode of spread, Symptoms Diagnosis, Treat ment Diseases of the female urethra</p> <p>Urethritis Urethral caruncule</p>	<p>Physiology of micturition Pregnancy & urinary problems</p> <p>Urodynamic studies cystoscopy</p>	

	<p> Urethral prolapse Urethral Diverticulum Urethral Stenosis Urinary Fistulae Genital Fistulae Definition, Etiology Anatomic Classification of Urinary Fistulae Clinical Features Investigations Management Latzko Procedure Chassar Mair technique Vaginal/transvesical / transabdominal approach ileal loop bladder Postoperative Management <u>Ureteric fistulae</u> Causes Diagnosis Management-Percutaneous nephrostomy Cystoscopic catheterization & stenting Boari-flap operation Ureteroneocystostomy <u>Urethrovaginal Fistula</u> </p> <p> Stress urinary incontinence Mechanism of Female Urinary Incontinence Genuine stress incontinence Urge incontinence Clinical Evaluation <u>Investigations</u> Stress test Cotton swab stick test Marshall and Bonney's Urethroscopy Urodynamic evaluation MRI studies Treatment Conservative <u>Surgical</u> Vaginal/Abdominal/combined Approach Complications Outcome following surgical repair </p>	<p> Burch Colposuspension Tension free vaginal T- tape Injectable Bulking agents </p> <p> Botox Injection Augmentation cystoplasty Neuro Modulation </p>	
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	<p>Detrusor instability Etiology Pathophysiology Symptoms Investigations Treatment</p>		
<p>GESTATIONAL TROPHOBLASTIC DISEASES</p>	<p>HYDATIFORM MOLE INCIDENCE PATHOLOGY Invasive mole Placental site trophoblastic tumour SYMPTOMS AND SIGNS INVESTIGATIONS Ultrasound,serum beta hcg TREATMENT FOLLOW UP PERSISTENT TROPHOBLASTIC DISEASE RECURRENT MOLAR PREGNANCY CHORIOCARCINOMA Pathology, Signs and symptoms FIGO staging Treatment—chemotherapy (triple therapy,EMACO)/surgery Follow up</p>		
<p>DISORDERS OF MENSTRUATION</p>	<p>Menstrual cycle irregularities Introduction Definitions Amenorrhea Primary – Classification Etiology Management Secondary amenorrhea Etiology Investigations Oligomenorrhea and hypomenorrhea Polymenorrhea Metrorrhagia Dysmenorrhea- Definition,etiology,types,varities, Clinical features,investigations, Treatment Premenstrual tension syndrome-</p>		

	<p>Introduction Etiology Clinical features Diagnosis Treatment</p>		
<p>MENORRHAGIA AND DYSFUNCTIONAL UTERINE BLEEDING</p>	<p>MENORRHAGIA Causes- General diseases Local pelvic cause Endocrine disorders-thyroid dysfunction Contraceptives iatrogenic Investigations Management General measures Treating the cause</p> <p>DYSFUNCTIONAL UTERINE BLEEDING definition pathogenesis classification-ovulatory,anovulatory pubertal menorrhagia metropathica hemorrhagica-pathological anatomy irregular shedding irregular ripening diagnosis treatment conservative,medical &surgical medical therapy- OCP,progestogen,danazol, NSAID,antifibrinolytic,GnRH analogue,MIRENA IUCD, Surgical- Curettage Minimal invasive surgery Hysteroscopic endometrial ablation(TCRE) Radiofrequency induced thermal endometrial ablation(RITEA) Cavaterm balloon therapy Microwave endometrial ablation(MEA) Uterine tamponade Endometrial laser intrauterine thermotherapy(ELITT)</p>	<p>SERM(Ormeloxifene)</p> <p>Von willibrands disease,and other bleeding dyscrasias</p>	

<p>FIBROMYOMA OF UTERUS AND UTERINE POLYPS</p>	<p>Bilateral uterine artery embolisation Hysterectomy- Abdominal Vaginal Laparoscopic LAVH</p> <p>Fibromyoma types— intramural,submucous,subserous symptoms- menstrualdisorders,infertility,pain,pressure symptoms Complications Degeneration Torsion Inversion Infection Treatment Medical –GnRH analogues,danazol,mifepristone, surgery Myomectomy— abdominal/vaginal/hysteroscopic/laparoscopic/ Hysterectomy—trans abdominal/vaginal/LAVH/laparoscopic Uterine artery embolisation</p> <p>UTERINE POLYPS Endometrial polyp Placental polyp Management</p>	<p>Cervical fibroid</p>	
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Topic	Must Read	Desirable to Read	Good to read
GENITAL PROLAPSE	<p><u>Support of genital tract</u> Delancey 3 levels of system of support <u>Etiology</u> Birth injuries, Menopause <u>Classification of Prolapse</u> Anterior vaginal wall Posterior vaginal wall, Uterine descent, Procidentia <u>Symptoms of prolapse</u> <u>Investigations</u> <u>Differential diagnosis</u> Anterior vaginal wall cyst Chronic uterine inversion Congenital elongation of cervix <u>Complication of Prolapse</u> <u>Prophylaxis& Management</u> Conservative-pessary Surgery Vaginal hysterectomy, Anterior& Posterior colporrhaphy& colpoperineorrhaphy Fothergills repair Abdominal sling surgery Vault prolapse Recurrent prolapse</p>	<p>Details of Sling Surgeries Abdomino cervico pexy</p>	<p>Pelvic reconstructive surgery Synthetic materials Biological Materials New system (Intra vaginal sling plasty, Apogee, Perigee)</p>
DISORDERS OF THE OVARY AND BENIGN TUMORS	<p>Non neoplastic Enlargements of the ovary Follicular cysts Follicular haematomas Lutein cysts of the ovary Multiple function cysts Polycystic ovarian syndrome (PCOS) or disease (PCOD) Ovarian Tumors Pathology Borderline ovarian Tumors Characteristics of borderline ovarian tumors Risk factors Pathology Tumors of the surface Epithelium</p>		

	<p> Serous cystadenoma and cystadenocarcinoma Mucinous tomour Endometrioid tomour Mesonephroid tomour Brenner tomour Spread of epithelial tumors of the ovary Germ cell Tomour Incidence Teratoma Dermoid cysts Solid teratoma of the ovary struma ovarii Carcinoid tumors Dysgerminoma Mixed germ cell tomour Sex cord stromal Tomour Feminizing functioning Mesenchymoma Granulosa cell tomour Theca cell tomour Virilizing Mesenchymoma Arrhenoblastoma Adrenal cortical tumor of the ovary Hilus cell tumor Gynandroblastoma Tumor Arising from connective Tissues of Ovary Ovarian fibroma Histogenesis of ovarian tumors Complications of ovarian tumors Benign ovarian Tumors <u>Symptoms</u> physical signs Differential diagnosis Investigations Treatment </p>		
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<p>GYNAECOLOGIC ONCOLOGY</p>	<p><u>Cancers of the Genital Tract</u> <u>Cancer of the Vulva</u> Preinvasive lesions Invasive carcinoma of the vulva (FIGO staging) management <u>Vaginal cancer</u> Clinical features Staging Diagnosis Management <u>Carcinoma of the cervix</u> Cervical intraepithelial neoplasia Metaplasia Dysplasia preinvasive cervical cancer (stage0) Invasive cancer of the cervix- signs symptoms & staging invasive cancer cervix and pregnancy(abnormal pap smear in pregnancy) management & treatment Endocervical cancer <u>Carcinoma of the Uterus and</u> <u>Endometrial Cancer</u> Predisposing factors Pathology' Clinical features Investigations' Differential diagnosis Staging Treatment Staging Treatment Surgery Postoperative radiotherapy Primary radiotherapy Progestogens Recurrent growths Uterine sarcomas Fallopian Tube Cancers FIGO staging Clinical features Differential diagnosis Investigations Management Prognosis</p>	<p>Vulval sarcoma, melanoma, bartholin's gland tumour</p> <p>Pap smear & classification, Colposcopy cervicography VIA , Cone biopsy. Radical Hysterectomy Pelvic Lymphadenectomy Laser ablation, LLETZ,LEEP, Radiotherapy, HPV vaccine</p> <p>Histological classification & grading Endometrial CA Uterine sarcoma</p>	<p>VIN classification, paget's disease, Bowen's disease.</p> <p>Sarcoma botryoides, Etiology and management</p> <p>AgNOR, HPV testing & HPV Vaccine</p> <p>Nerve-Sparing Radical Hysterectomy Prognostic Variables Adjuvant Radiation Neoadjuvant Chemotherapy Recurrent cervical cancer</p> <p>Aspiration cytology Prognostic Variables</p>
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	Ovarian Cancer FIGO staging Epithelial cancers of the ovary Non-epithelial malignancies of the ovary Sex cord stromal tumors Metastatic carcinomas Management-staging Laprotomy Strategies to Reduce the Incidence of Genital Tract Malignancies (Prophylaxis) Palliative and adjuvant therapy		Risk factors, criteria for diagnosis of borderline tumors, krukemberg tumor Second look laprotomy Stem cell therapy
ENDO METRIOSIS	Etiology Genetics factors, Mutation, Aneuploidy, Immunological factors& inflammation Site Pathology Classification Clinical features Physical findings Endocrinological abnormalities Differential diagnosis Investigations Prophylaxis Prophylaxis Management Endometriosis of the rectovaginal septum Adenomyosis Treatment		Medical treatment <u>Non hormonal therapy</u> Modulation of Cytokines Leukotriene receptor antagonists(Pentoxifylline) Inhibition of Matix Metalloproteinase <u>hormonal therapy</u> Progesterone antagonists Onapristone Mifepristone Aromatase inhibitors-fadrozole SERM-Raloxifene Future research(Rat & Rabit animal models Role of laparoscopy
HORMONAL THERAPY	Estrogens Physiology Commonly used Estrogens Contraindications Indications Side effects Progesterone Preparations	Estrogen preparations	

	<p>Classification Therapeutic applications Contraindications Side effects Androgens Uses Side effects <u>Danazol</u> Uses Side effects Gestrione Antioestrogens Clomiphene citrate Mode of action Indications Contraindications Side effects Selective Estrogen Receptor Modulators (SERMs) Acting as Antioestrogen Tamoxifen Dosage Side effects Precautions Antiprogesterone Mifepristone Therapeutic applications Side effects Antiandrogens Cyproterone acetate(dianette, androcur) Spironolactone Dosage Side effects Flutamide Dosage Side effects Finastride Dosage Side effects Pituitary Hormones Gonadotropin-releasing Hormones and its Analogues Clinical uses Side effects Prolactin</p>	<p>Ovarian hyper stimulations syndrome (OHSS)-golan's Classifications</p>	<p>HCG & its Therapeutic applications</p>
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	<p>Bromocriptine Contraindications Therapeutic applications Dose Side effects Results</p> <p>PROSTAGLANDINS Indications for use in obstetric and gynaec dosage Side effects</p> <p>Human chorionic gonadotropin Therapeutic applications</p>		
ENDOSCOPY IN GYNAECOLOGY	<p>Laparoscopy Indications for Laparoscopy Diagnostic laparoscopy Operative laparoscopy General indications Other indications Technique of laparoscopy Complications</p> <p>Hysteroscopy Technique Diagnostic indications Therapeutic indications Distension media in hysteroscopy Contact hysteroscopy Complications of hysteroscopy Late complications</p> <p>Salpingoscopy and Falloposcopy Colposcopy Indications Therapeutic Indications Technique of Colposcopy Colposcopic findings Abnormal findings Colpomicroscopy</p> <p>Extragenital Endoscopy</p>	<p>Fluid Management</p> <p>Hysteroscopy endometrial Ablation</p>	
IMAGING MODALITIES IN GYNAECOLOGY	<p>Plain Radiography Hysterosalpingography Indications</p>		

	<p>Contraindications Sonosalpingography Intravenous Urography Indications Precautions and contraindications Cystography and Urethrography Gastrointestinal studies Barium meal and follow through Barium enema Arteriography and arterial Embolization Ultrasonography Transabdominal Ultrasonography</p> <p>Transvaginal ultrasound</p> <p>Diagnostic indications</p> <p>Therapeutic applications of ultrasonography in clinical practice Computed Tomography Scan Technique Indications Magnetic Resonance Imaging Indications Contraindications Radionuclide Imaging Dual Photon Densitometry</p>		
<p>OPERATIVE GYNAECOLOGY</p>	<p>Principles of Anatomy & Perioperative considerations Surgical Anatomy of Pelvis Pre operative care Post Operative care Principles of Gynecological Surgical Techniques Incisions for Gynecological surgery</p> <p>Surgery for Fertility Reconstructive Tubal Surgery</p> <p>Surgery For Benign Gynaecologic Conditions Surgery for Anomalies of the Mullerian</p>	<p>Suture Material & Surgical Instruments</p> <p>Water, Electrolyte & Acid-Base Metabolism</p> <p>Diagnostic and Operative Laparoscopy</p> <p>Operative Hysteroscopy</p> <p>Assisted</p>	<p>Application of Laser in Gynaecology</p>

	<p><u>Ducts</u> Vagino Plasty 1.Abbe-wharton Mc Indoe Operation 2.Williams Vulvovaginoplasty</p> <p><u>Tubal Sterilization</u></p> <p>Surgical Approach 1.Minilaparotomy 2.Laparoscopy 3.Tubal Occlusion</p> <p><u>Vasectomy</u> <u>Surgery for Benign Disease of the Ovary</u> Resection of Benign cysts</p> <p><u>Leiomyomata Uteri and Myomectomy</u></p> <p>Medical Management of Uterine Leiomyomata Abdominal Myomectomy</p> <p><u>HYSTERECTOMY</u> 1. Abdominal Hysterectomy Indications Preoperative counseling Preparation for Hysterectomy Complications Post Operative care 2.Vaginal Hysterectomy Indications Preoperative counseling Preparation for Hysterectomy</p>	<p>reproductive techniques Surgical Technique for Uterine Unification 1.Modified Jones Metroplasty Tompkins 2.Procedure 3.The Strassman Metroplasty</p> <p>Laparoscopic Management of an ovarian Mass</p> <p>Vaginal Myomectomy Hysteroscopic Resection of Submucous Myomata Laparoscopic Myomectomy</p> <p><u>Laparoscopic</u></p>	<p>Essure TM Microinsert-trancervical device insertion via Hystroscopy</p> <p>Reconstruction of the Ovary Paradoxical Oophorectomy</p> <p>Embolotherapy</p>
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	<p>Operative Technique Complications Post Operative care</p> <p>SURGERY FOR CORRECTIONS OF DEFECTS IN PELVIC SUPPORT <u>Pelvic Organ Prolapse</u> Anatomic considerations Clinical Evaluation Pelvic Organ Prolapse-Quantification system (POP-Q) Baden-Walker Halfway system <u>SITE-Specific Repair</u> Cystourethrocele Paravaginal Defect Repair Posterior Compartment defects VAGINAL VAULT PROLAPSE 1. McCall Culdoplasty 2.Sacrospinous Ligament Fixation 3.Abdominal Sacral Colpopexy</p>	<p><u>Hysterectomy</u> 1.Laparoscopically assisted vaginal hysterectomy (LAVH) 2.Laparoscopic subtotal hysterectomy (LSH) Total 3.Laparoscopic hysterectomy (TLH) 4.Vaginally assisted laparoscopic hysterectomy (VALH) Staging system for Laparoscopic hysterectomy</p> <p>Non surgical treatment for pelvic organ prolapse—use of vaginal pessaries</p> <p>High Uterosacral Ligament Suspension</p> <p>Iliococcygeus Fascia suspension Le Fort Partial Colpocleisis</p>	<p>Vesico vaginal</p>
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	<p>CANCER OF THE CERVIX Surgical treatment for early stage cervical cancer Concept of radical abdominal hysterectomy and bilateral pelvic lymphadenectomy</p> <p>ADJUVANT THERAPY IN CONJUNCTION WITH RADICAL SURGERY</p> <p><u>ENDOMETRIAL CANCER</u> SURGICAL STAGING AND TREATMENT</p> <p>OVARIAN CANCER Comprehensive surgical staging Surgical staging for apparent early stage ovarian cancer</p> <p>Primary cytoreductive surgery</p> <p>Neoadjuvant chemotherapy and interval cyto reductive surgery</p>	<p>Laprascopically assited radical vaginal hysterectomy</p> <p>(SCHAUTA)</p> <p>Second look laparotomy</p>	<p>fistula and urethra vaginal fistula</p> <p>Secondary cyto reductive surgery</p>
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OBSTETRICS ANAESTHESIA & ANALGESIA

Topic	Must Read	Desirable to Read	Good to read
NERVE SUPPLY OF FEMALE GENITAL TRACT	Sympathetic & Para Sympathetic Nerve supply of the female genital tract & its applied Anatomy		
PHYSIOLOGY OF PREGNANCY	Physiological changes in Pregnancy		
PHARMACOLOGY	Pharmacology of drugs used in Obstetrics	Placental transfer of drugs	
LABOUR ANALGESIA	Various methods of pain relief in labour Pharmacological & Non Pharmacological methods Labour epidural analgesia		
ANAESTHESIA FOR OPERATIVE OBSTETRICS	GA, Spinal & epidural Anaesthesia for LSCS surgery		Walking epidural
ANAESTHESIA FOR LAPAROSCOPIC SURGERY	Anaesthetic implications of GA for Laparoscopic surgery		Importance of Daycare surgery

POSTINGS

Three Year MD

Year	L.Ward	AN/PN Ward	Gyn/P.O. Ward	Anesthesia	Pediatrics	Medicine	Surgery & Urogynecology	FW	Infertility & Sonar	Colposcopy & Pathology	Radiotherapy	Oncology	Endocrinology	Genetics	Social Obstetrics
I Year	3 months	3 months	3 months			1 month	15+15 days 15days	15days	15days						
II Year	3 months	3 months	3 months	15days	1 month				15days	15+15 Days					
III Year	3 months	3 months	3 months	15days				15days			7 Days	7 Days	7 Days	7 Days	1 month

Two Year MD

Year	L.Ward	AN/PN Ward	Gyn/P.O. Ward	Anesthesia	Pediatrics	Medicine	Surgery & Urogynecology	FW	Infertility & Sonar	Colposcopy & Pathology	Radiotherapy	Oncology	Endocrinology	Genetics	Social Obstetrics
I Year	3 months	3 months	3 months		15days	1 month	15+15Days	15days							
II Year	3 months	2½ months	2½ months	15days				15days	15days	15days	7 Days	7 Days	7 Days	7 Days	1 month

Two Year DGO

Year	L.Ward	AN/PN Ward	Gyn/P. O. Ward	Anesthesia	Pediatrics	FW	Infertility & Sonar	Colposcopy & Pathology	Radiotherapy	Oncology	Endocrinology	Genetics	Social Obstetrics
I Year	3 months	3 months	3 months		15days	15days	15days	15days	7 Days	7 Days	7 Days	7 Days	
II Year	3 months	3 months	3 months	15days	15days	15days		15days					1 month