

SYLLABUS FOR PhD IN OBSTETRICS AND GYNAECOLOGY

A: COURSE CONTENT FOR FORMATIVE EXAMINATION FOR PhD OBGY

Course Content:

- Anatomy:**
- Normal & abnormal development, structure and function (female & male) uro-genital system and female breast.
 - Applied Anatomy of genital-urinary system, abdomen, pelvis, pelvic floor anterior abdominal wall, upper thigh (inguinal ligament, inguinal canal, vulva, rectum and anal canal). Physiology of Spermatogenesis.
 - Endocrinology related to male and female reproduction. (Neurotransmitters).
 - (Anatomy) & Physiology of urinary & lower GI (Rectum/anal canal) tract.
 - Development, structure & function of placenta, umbilical cord & amniotic fluid.
- Physiology**
- Anatomical & physiological changes in female genital tract during pregnancy.
 - Anatomy of fetus growth & development, fetal physiology & fetal circulation.
 - Physiological & Neuro-endocrinal changes during puberty, adolescence, menstruation, ovulation, fertilization, climacteric & menopause.
- Biochemistry**
- Biochemical and endocrine changes during pregnancy, including systemic changes in cardiovascular, hematological, renal, hepatic, and other systems.
 - Biophysical and biochemical changes in uterus and cervix during pregnancy & labour.
- Pharmacology**
- 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 labour, on fetus, their excretion through breast milk.

- Pathology**
- Pathophysiology of ovaries, fallopian tubes, uterus, cervix, vagina and external genitalia in healthy and diseased conditions.
 - Normal and abnormal pathology of placenta, umbilical cord, amniotic fluid and fetus.
 - Normal and abnormal microbiology of genital tract, Bacterial, viral & parasitical infections responsible for maternal, fetal and gynecological disorders.
 - Humoral and cellular immunology in Obstetrics &Gynecology.
 - Gametogenesis, fertilization, implantation &Early development of embryo.
 - Normal Pregnancy, physiological changes during pregnancy, labour &purperium.
 - Immunology of pregnancy.
 - Lactation.
 - Pathophysiology of Gynaecological disorder.
- Endocrinology-** Role of hormones in Obstetrics &Gynecology. Tumour Markers in Obstetrics &Gynecology for Non neoplastic and Neoplastic Diseases.
- Medical Genetics:**
- Basic medical genetics including cytogenesis.
 - Pattern of inheritance.
 - Chromosomal abnormalities- types, incidence, diagnosis, management and recurrence risk.
 - General principles of Teratology
 - Screening, counseling and prevention of developmental abnormalities.
- Birth defects – genetics, teratology &counseling

OBSTETRICS SOCIAL OBSTETRICS & NEW BORN	CLINICAL GYNAECOLOGY & FAMILY PLANNING
<p>. Antenatal Care: Prenatal care of normal pregnancy including examination, nutrition, immunization & follow up. Identification and management of complications and complicated of pregnancy- abortion, ectopic pregnancy, vesicular mole, Gestational Trophoblastic. Diseases, hyperemesis gravidarum</p> <p>Intrapartum Care:</p> <ul style="list-style-type: none"> - Normal Labour – mechanism & management. - Pantographic monitoring of labour progress, recantation of abnormal labour and its appropriate management. - Identification and conduct of abnormal labour and complicated delivery breech, forceps delivery, caesarian section, destructive operations. - Induction and augmentation of labour. - Management of abnormal labour- abnormal pelvis, soft tissue abnormalities of birth canal, mal-presentation, of fetus, abnormal uterine action, Obstructed labour and other dissocial. - Analgesia & anesthesia in labour. - Maternal & fetal monitoring in normal & abnormal labour (including electronic fetal monitoring). - Identification and management of intrapartum complications, Cord presentation, complication of 3rd stage of labour – retained placenta, inversion of uterus, rupture of uterus, post partum hemorrhage. <p>3) Post Partum Complication of 3rd stage of labour – retained placenta, placenta, inversion of uterus post partum hemorrhage, rupture of uterus, Management of primary & secondary post partum hemorrhage, retained placenta, uterus inversion Post-</p>	<p>Epidemiology and etiopathogenesis of gynecological disorders.</p> <ul style="list-style-type: none"> - diagnostic modalities and management of common benign and Malignant gynecological diseases (diseases of genital tract). • Fibroid uterus. • Endometriosis & adenomyosis. • Endometrial hyperplasia. • Genital prolapse (uterine & 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, Ca Breast. • Definition of demography and its importance in Obstetrics and Gynecology. • Statistics regarding maternal mortality, prenatal mortality/ morbidity, birthrate, fertility rate. • Organizational and operational aspects of National health policies & programs in relation to population and family welfare including RCH. • Various temporary and permanent methods of male and female contraceptive methods. • Knowledge of in contraceptive techniques (including recent development). <ol style="list-style-type: none"> 1. Temporary methods. 2. Permanent Methods. <p>Recent advances in contraceptive technology</p>

partum collapse, amniotic fluid embolism.

General Obstetrics and High Risk pregnancy	Operative & Social Obstetrics, New Born
<p>. Antenatal Care: Multiple pregnancy, Antepartum hemorrhage, Pregnancy induced hypertension, preeclampsia, Eclampsia other associated hypertensive disorders, Anemia, Rh incompatibility, Diabetes, Heart disease, Renal & Hepatic disease, Preterm- post term pregnancies, Intrauterine fetal growth retardation. Neurological, hematological, dermatological diseases, immunological disorders and other medical & surgical disorders/ problems associated with pregnancy, Multiple pregnancies, Hydramnios. Oligohydromnios. Diagnosis of contracted pelvis (CPD) and its management, High Risk pregnancy. Pregnancy associated with complications, medical & surgical problems. Prolonged gestation, Preterm labour, premature rupture of membranes, Blood group incompatibilities. Recurrent pregnancy wastage, Evaluation of fetal & maternal health in complicated pregnancy by making use of diagnostic modalities including modern ones (USG, Doppler, Electronic monitors) and plan for safe delivery for mother and fetus, Identifying fetus as risk & its management. Infections in pregnancy (Bacterial, viral, fungal, protozoal) Malaria, Toxoplasmosis, Viral- Rubella, CMV, Herpes, HIV, Hepatic viral infections, Sexually transmitted infections. (STDs) Mother to fetal transmission of infections. Identification & management of fetal malpositions and malpresentations. Management of pregnancies complicated by medical, surgical (with other specialties</p>	<p>OPERATIVE OBSTETRICS: PG Students must have performed reasonable routine procedures and assisted/ observed uncommon procedures: - Disorder making, technique & management of complications. - Vaginal instrumental delivery, Caesarian section, Obst. Hysterectomy, destructive operations, manipulations (External/internal podalic version, manual removal of placenta etc.)</p> <ul style="list-style-type: none"> • Medical Termination of pregnancy – safe abortion – selection of cases, technique & management of complication. MTP law. M.T.P. P.N.D.T. act et. National health MCH programs, Social obstetrics and vital statistics. Recent advances in Obstetrics. <p>New Born</p> <ol style="list-style-type: none"> 1) Care of new born: Normal and high risk new born (including NICU care) Problems of new born at birth (resuscitation). Management of early neonatal problems. 2) Asphyxia and neonatal resuscitation. 3) Neonatal sepsis- prevention & management. 4) Neonatal hyper- bilirubinemia- investigation & management. 5) Birth trauma – Detection & management 6) Detection and management of fetal/neonatal malformation. 7) Management of common neonatal problems.

as required)
&gynecological disease. Anemia, hematological disorders. Respiratory, Heart, Renal, Liver, Skin diseases. Gastro Intestinal, Hypertensive, Autoimmune, Endocrine disorders.

Associated surgical problems- Acute Abdomen (surgical emergencies – appendicitis & GI emergencies)

Gynecological disorders associated with pregnancy – congenital genital tract development anomalies, (Gynaec Pathologies- fibroid uterus CaCx, genital prolapse etc.

Prenatal diagnosis (of fetal problems & abnormalities), treatment fetal therapy.

2) Intrapartum Care: Identification and management of intrapartum complications, Cord presentation, complication of 3rd stage of labour – retained placenta, inversion of uterus, rupture of uterus, post partum hemorrhage.

3) Post Partum

Identification & management of genital tract trauma – perineal tear, cervical/ vaginal tear, episiotomy complications, rupture uterus.

Management of critically ill woman. Post partum shock, sepsis & psychosis. Post Partum contraception. Breast feeding practice; counseling & importance of breast-feeding. Problems in breast feeding and their management, Baby friendly practice.

Normal and abnormal puerperium – sepsis, thrombophlebitis, mastitis, psychotic.

Hematological problems in Obstetrics including coagulation

CLINICAL GYNAECOLOGY	OPERATIVE GYNAECOLOGY:	FAMILY WELFARE & DEMOGRAPHY
<p>Diagnosis and surgical management of clinical conditions related to congenital malformations of genital tract. Reconstructive surgery in gynecology.</p> <ul style="list-style-type: none"> - Intersex, ambiguous sex and chromosomal abnormalities. <p>Reproductive endocrinology: Evaluation of primary/ secondary Amenorrhea, management of Hyperprolactenemia, Hirsutism, chronic an-ovulation, PCOD, thyroid and other endocrine dysfunctions.</p> <ul style="list-style-type: none"> - Infertility – Evaluation and management. <p>Methods of Ovulation Induction Tubal (Micro) surgery. Management of immunological factors of Infertility. Male Infertility. Obesity & other Infertility problems. (Introductory knowledge of) Advanced Assisted Reproductive techniques (ART).</p> <ul style="list-style-type: none"> - Reproductive tract Infections: prevention, diagnosis & treatment. <p>STD HIV Other Infections Genital Tuberculosis.</p> <ul style="list-style-type: none"> - Principles of radiotherapy and chemotherapy in gynecological malignancies. Choice schedule of administration & 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, hyperprolactenemia (galactorrhea). Hyperandrogenism, thyroid- puituitary-adrenal disorders, menopause and its treatment (HRT). Urological problems in Gynecology – 	<p>D&C,Cervicalbiopsy,Cryocauterisation,Conservative surgeries for CIN , AUB .Myomectomy,Slingsurgeries,Manchester operation Abdominal & Vaginal hysterectomy. Surgical Procedures for genital prolapse, fibromyoms, endometriosis, ovarian adenexal, uterine, cervical, vaginal and vulval pathologies. Surgical treatment for urinary & other fistulae, incontinence. Diagnostic and Operative Endoscopy.</p>	<p>Definition of demography and its importance in Obstetrics and Gynecology. Statistics regarding maternal mortality, prenatal mortality/ morbidity, birthrate, fertility rate. Organizational and operational aspects of National health policies & programs in relation to population and family welfare including RCH. Various temporary and permanent methods of male and female contraceptive methods. Knowledge of in contraceptive techniques (including recent development). Temporary methods. Permanent Methods. Recent advances in contraceptive technology. Provide adequate services to service seekers of contraception including follow up. Medical termination of pregnancy: act, its implementation, providing safe and</p>

<p>Diagnosis and management. Urinary tract infection. Urogenital Fistulae. Incontinence Other urological problems.</p> <ul style="list-style-type: none"> - Orthopedic problems in Gynecology. - Menopause: management (HRT) and prevention of its complications. - Endoscopies (Laparoscopy – Hysteroscopy) <p>Diagnostic & simple therapeutic procedures (PG students must be trained to do these procedures) Recent advances in gynecology – Diagnostic & therapeutic. Pediatric. Adolescent & Geriatric Gynecology. Introduction to Advance Operative procedures. History taking, examination and investigation. Causes and management of male infertility. Indications, procedures of Assisted Reproductive Techniques in relation male infertility problems.</p>		<p>adequate services. Demography & population dynamics. Contraception (fertility control) Pearl Index</p>
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