

पाटन स्वास्थ्य बिज्ञान प्रतिष्ठान, सेवा आयोग
प्राज्ञिक सेवा, प्रसुति तथा स्त्री रोग समूह, प्राध्यापक पद (११ औं) तहको
खुल्ला र अन्तरिक प्रतियोगिता प्रतियोगितात्मक परीक्षाको पाठ्यक्रम
Paper II: Technical Subject
Section (A) –45 Marks

1. **OBSTETRICS**

- 1.1 **Anatomy:** Anatomy of abdomen and pelvis in relation to pregnancy and surgical procedure related to delivery and gynecological procedure.
- 1.2 **Physiology:** Physiological changes in normal pregnancy.
- 1.3 **Pathology:** Pathological changes in pregnancy.
- 1.4 **Pharmacology:** Drugs and medicines used during pregnancy and lactations. Pregnancy categorization of drugs and contraindication of drugs during pregnancy.
- 1.5 **Immunology:** Immunological changes in pregnancy. Fetal development of the immune system, with particular knowledge of rhesus and isoimmunization.
- 1.6 **Biochemistry:** Hormonal changes and glucose and electrolytes metabolism during pregnancy.
- 1.7 **Infection in pregnancy:** Infection in pregnancy and its effect on fetus. Epidemiology of the diseases prevalent and its diagnostic techniques, prophylaxis, immunization and the use of antibiotics and antiviral agents.
- 1.8 **Bio- statistics:** Collect data, apply methods of statistical analysis. Knowledge of setting up clinical trials and the ability to interpret data through commonly used terms and techniques, interpretation of results of research, investigation, clinical trial design and medical audit.
- 1.9 **Diagnostic imaging:** Basic Abdominal and obstetric Ultrasound including Transvaginal ultrasound. Principle of computerized tomographic scanning (CT) and magnetic resonance imaging (MRI) of pelvis. Pathological findings in CT and MRI of different Gynecological disorders. Recent advances in diagnostic and therapeutic imaging in both obstetrics and gynecology.
- 1.10 **Genetics:** Knowledge of normal, abnormal karyotypes and the conditions occurring with the abnormal karyotypes. Inheritance of genetic disorders and of the genetic causes of early abortion
- 1.11 **Embryology:** Normal embryological, fetal development and its deviation. Demonstrate the ability to explain to patients and discuss its practical and ethical implications.
- 1.12 **Pregnancy:** Changes in maternal and fetal anatomy and physiology during normal pregnancy and its deviation. Preconception, antepartum, intrapartum and postpartum management.
- 1.13 **Analgesia and anesthesia:** management of pregnancy related aches and pain including painless delivery. Analgesia in pregnancy, delivery, CS and postoperative pain management in gynecology.
- 1.14 **Nutrition:** nutritional requirements during pregnancy and puerperium. Understand the importance of breast feeding and postpartum contraception.
- 1.15 **Abnormal pregnancy:** management of abnormality during pregnancy, labor and puerperium. Understand effects of pre-existing disease (obstetrical, gynecological medical or surgical) on pregnancy and demonstrate the ability to provide informative counseling before, during and after pregnancy.
- 1.16 **Medical/surgical disorders in pregnancy:** Basic concept of management of medical and surgical disorders in pregnancy. Management of medical disorders because of pregnancy e.g Gestational diabetes, eclampsia and HTN, jaundice during pregnancy etc.

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- 1.17 **Trimester specific problem:** management of clinical situation related to different trimester of pregnancy. Hyperemesis in first trimester, PPORM and PROM and Antepartum hemorrhage.
- 1.18 **Infection during pregnancy:** management of infections during pregnancy and its vertical transmission.
- 1.19 **Deliveries:** conduct normal and instrumental deliveries. Management of shoulder dystocia and retained placenta.
- 1.20 **Operative Obstetrics:** repair of perineal tear, caesarean section, uterine rupture and peripartum hysterectomy.
- 1.21 **Critical care Obstetrics.** Management of PPH, amniotic fluid embolism and deep venous thrombosis and its consequences. Management of septic shock.
- 1.22 **Management of post-partum:** wound care, secondary PPH, puerperal sepsis and psychiatric disorder.
- 1.23 **Neonatal resuscitation:** Knowledge of neonatal resuscitation and of the principles of neonatal management like respiratory distress syndrome (RDS), prematurity and congenital abnormality.
- 1.24 **Counseling:** Preconception, antenatal, postnatal counseling, and breaking bad news

Section (B) –55 Marks

2. **GYNECOLOGY**

- 2.1 **Prepubertalgynecology:** Knowledge of normal and abnormal sexual development
- 2.2 **Pediatricgynecology:** pathology and its management
- 2.3 **Adolescent gynecology:** Normal puberty, pubertal disorders and its management.
- 2.4 **Adolescent reproductive health:** counseling.
- 2.5 **Menstruation:** Physiology of normal menstruation, patho-physiology of menstrual disorders and their approach and management.
- 2.6 **Abdomino-pelvic mass:** Approach and management.
- 2.7 **Menopause:** Management and hormone replacement therapy.
- 2.8 **Infertility:** Causes, investigation and management of the infertile couple. Assisted reproductive techniques and surrogacy with its dilemma and ethical implications.
- 2.9 **Genital tract infection:** Sexually transmitted diseases including AIDS.
- 2.10 **Early pregnancy loss:** Cause of pregnancy loss, its management and complications. Management of ectopic gestation.
- 2.11 **Therapeutic abortion:** abortion law of the country.
- 2.12 **Gestational trophoblastic disease:** including neoplasia
- 2.13 **Contraception:** Various methods of permanent and temporary contraceptives, their use and side effect.
- 2.14 **Psycho-sexual disorders:** Psychosexual problems including puerperal psychosis and the psycho-social impact of violence against women.
- 2.15 **Uro-gynecology:** Surgical and non-surgical management of uro-gynecological problems.
- 2.16 **Gynecological oncology:** Epidemiology and etiology and the principles of carcinogenesis, tumor immunology and pathology. Diagnostic techniques and staging of gynecological tumors. Treatment including surgery, radiotherapy, chemotherapy, and terminal care of patients.
- 2.17 **Breast:** Problems of lactation and its management.

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- 2.18 **Laparoscopic surgery** in gynecology : Principles , methods, indications and Complications,
 - 2.19 **Gynecological surgery**: Principle of gynecological surgical procedures. Preoperative and post-operative care and follow up. Basic postoperative abdominal complication management and surgical wound management.
 - 2.20 **Palliative care**: Terminally ill patient care
 - 2.21 **Ethical and medico-legal aspects**: Basic ethical and legal issues involved in contemporary obstetrical and gynecological practice.
 - 2.22 **Sexual assault**: Examination recording and its medical implications.
 - 2.23 **Recent advances**: Uro-gynecology, Infertility, Gynecological oncology.
 - 2.24 **National/Community obstetrics and gynecology**:
 - 2.24.1 Existing national health system of the country and the policies and plan of the government.
 - 2.24.2 National Health Programmes related to maternal and child health, continuing health services for maternal and child health, organizing health care delivery and referral system.
 - 2.24.3 Future vision to reduce maternal and perinatal mortality and morbidity.
 - 2.24.4 Knowledge about basic community disease profile
 - 2.24.5 Definitions and causes of maternal, perinatal and neonatal morbidity and mortality.
 - 2.24.6 Effect of socio-cultural behavior in Reproductive health.
3. **COUNSELING**
- 3.1 Different modalities options in case management.
 - 3.2 Preoperative and postoperative counseling
 - 3.3 Breaking bad news