

**Paper II: Technical Subject**

**Section (A) - 45 Marks**

**1. Basic & Applied**

**1.1 Applied Surgical Anatomy**

- 1.1.1 Required to have acknowledge of the structure and function of all system of the body (where applicable to common clinical conditions in surgery)
- 1.1.2 Knowledge of histology to understand the function to tissue and organs as well as growth, degeneration and repair
- 1.1.3 Embryological basis of common congenital anomalies

**1.2 System**

- 1.2.1 Nervous system
- 1.2.2 Respiratory system
- 1.2.3 Cardiovascular system
- 1.2.4 Digestive system
- 1.2.5 Endocrine system
- 1.2.6 Musculoskeletal system
- 1.2.7 General – e.g. Acid-base balance, fluid and electrolyte balance, nutrition, metabolic response to trauma and sepsis, etc.

**2. Applied Physiology**

**3. Surgical Pathology**

- 3.1 Knowledge of the surgical pathology and microbiology in the context of surgery including inflammation, infection, neoplasm, response on the tissues to injury, disturbance of growth, degeneration processes, repair and regulation
- 3.2 Immunology and Genetics
- 3.3 Neoplastic diseases
- 3.4 Gross and histopathology of common surgical conditions
- 3.5 Nervous system
- 3.6 Respiratory system
- 3.7 Cardiovascular system
- 3.8 Genito-urinary system
- 3.9 Gastrointestinal system
- 3.10 Muscleskeletal system

**4. Critical Care**

- 4.1 Basics of pathophysiology, approach and management of critical surgical situation e.g. Trauma, shock, sepsis, organfailure
  - 4.1.1 Clinical pictures
  - 4.1.2 Investigation
  - 4.1.3 Diagnosis confirmation
  - 4.1.4 Management–use of equipments

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- 4.1.5 Monitoring–complications
- 4.1.6 Counseling – communication
- 4.1.7 Follow-up

5. **Recent advance**

- 4.2 Research-inside country
- 4.3 Recent advance–international
- 4.4 Not published research work
- 4.5 Future national vision

**Section (B) - 55 Marks**

6. **Surgical Management**

- 6.1 Principle of management of common general surgical conditions
  - 6.1.1 Clinical practice (History and examinations)
  - 6.1.2 Investigation
  - 6.1.3 Provisional Diagnosis and differentials
  - 6.1.4 Treatment-Conservative, operative, palliative
  - 6.1.5 Monitoring
  - 6.1.6 Follow-up–of the patients with general surgical condition of following systems
    - 6.1.6.1 Nervous system
    - 6.1.6.2 Respiratory system
    - 6.1.6.3 Cardiovascular system
    - 6.1.6.4 Gastrointestinal system
    - 6.1.6.5 Genitourinary system
    - 6.1.6.6 Endocrine and breast
    - 6.1.6.7 Musculo-skeletal system and soft tissue
    - 6.1.6.8 Trauma/Polytrauma

7. **Principles of Surgery**

- 7.1 Knowledge of the General principle and practice of Surgery
  - 7.1.1 Imaging techniques/interventional Radiology
  - 7.1.2 Endoscopy/Laparoscopy
  - 7.1.3 Surgery at extremes of life
  - 7.1.4 Theatre techniques
    - 7.1.4.1 Aseptic techniques–sterilization
    - 7.1.4.2 Anesthesia in general, maintenance of homeostasis
    - 7.1.4.3 Basic techniques–suturing material dressing plaster
    - 7.1.4.4 Diathermy and electrosurgical devices
    - 7.1.4.5 Tourniquet
  - 7.1.5 Wound healing, dehiscence, scar, contractures
  - 7.1.6 Post operative complication and management

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- 7.1.7 Sepsis's surgery
  - 7.1.7.1 Acute and Chronic, inflammation
  - 7.1.7.2 Wound infection and septicemia
  - 7.1.7.3 TB, Leprosy, AIDS, Bacterial infection
  - 7.1.7.4 Antiseptic, Antibiotic policies

**8. OperationSurgery**

**8.1 Nervous System**

- 8.1.1 Exposure to extradural haematoma
- 8.1.2 Skull traction
- 8.1.3 Nerve repair and transplant
- 8.1.4 Trauma–skull, strive

**8.2 Respiratory System**

- 8.2.1 F.B. in respiratory tract
- 8.2.2 Tracheostomy, cricothyroidotomy
- 8.2.3 Chest Drainage
- 8.2.4 Thoractomy
- 8.2.5 Chesttrauma (variety of injuries)

**8.3 Cardiovascular**

- 8.3.1 Cardiac Tamponade
- 8.3.2 Exposure to artery and vein,embolectomy
- 8.3.3 Amputations

**8.4 Gastrointestinal System**

- 8.4.1 All type of GI Surgery of all magnitude and types
- 8.4.2 Different combination of operation
- 8.4.3 Except-transplantation

**8.5 Genitourinary system**

- 8.5.1 Suprapubic bladder drainage
- 8.5.2 Cystoscopy
- 8.5.3 Exposure of kidney, calculus, obstructive uropathy
- 8.5.4 Perinephric abscess
- 8.5.5 Scrotal/testicular operation
- 8.5.6 Ectopic pregnancy/otherpelvicsurgery

**8.6 Endocrine and breast**

- 8.6.1 Thyroid/parathyroid
- 8.6.2 Breast surgery (noreconstruction)

**8.7 Musculoskeletal and soft tissue**

- 8.7.1 Simple skeletal traction
- 8.7.2 Compartmental syndrome
- 8.7.3 Bone infection

**8.8 Plastic**

- 8.8.1 Simple ceftlip repair

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- 8.8.2 Skin grafting /flaps
- 8.8.3 Skin lesion
- 8.8.4 Lymph node and biopsy

8.9 **Other**

- 8.9.1 Venesection centralline
- 8.9.2 Laryngoscope, E Tintubation
- 8.9.3 FNAC /tru-cut needle biopsy
- 8.9.4 Defibrillation

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