

**Paper II: Technical Subject**

- 1) Basic & Applied
  - a) Applied Surgical Anatomy
    - i) Required to have acknowledge of the structure and function of all system of the body where applicable to common clinical conditions
    - ii) Knowledge of histology to understand the function to tissue and organs as well as growth, degeneration and repair
    - iii) Embryological basic of those common congenital anomalies.
  - b) System
    - i) Nervous system
    - ii) Respiratory system
    - iii) Cardiovascular system
    - iv) Endocrine system
    - v) Muscal skeletal system
    - vi) General – eg. Acid-base balance, fluid and electrolyte balance, nutrition, metabolic response to trauma and sepsis etc.
- 2) Applied Physiology
- 3) Surgical Pathology
  - a) Knowledge of the principles of pathology and microbiology virology in context of surgery including inflammation, infection, neoplasm, response on the tissues to injury disturbance of growth, degeneration processes, repair and regulation.
  - b) Immunology, Genetics
  - c) Neoplastic diseases
  - d) Pathology specimens and etc.
  - e) Nervous system
  - f) Respiratory system
  - g) Cardiovascular system
  - h) Genito-urinary system
  - i) Gastrointestinal system
  - j) Muscle skeletal system
- 4) Critical Case
  - a) Emphasis on pathos physiological and fundamental surgical situation eg. Trauma, shock, organ failure, infection etc.
    - i) Clinical pictures
    - ii) Investigation
    - iii) Diagnosis confirmation
    - iv) Management – use of equipments
    - v) Monitoring – complications
    - vi) Counseling – communication
    - vii) Follow-up
- 5) Surgical Management
  - a) Broad Knowledge of principle of management

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नेपाल स्वास्थ्य सेवा, सर्जरी समूह जनरल सर्जरी उपसमूह, एघारौं (११) तहको खुला र आन्तरिक प्रतियोगितात्मक  
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- i) Clinical practice
  - ii) Investigation
  - iii) Diagnosis
  - iv) Treatment- Conservative, operations, palliative
  - v) Monitoring
  - vi) Follow-up – of the condition of
    - (1) Nervous system
    - (2) Respiratory system
    - (3) Cardiovascular system
    - (4) Gastro intestinal System
    - (5) Genitourinary system
    - (6) Endocrine and breast
    - (7) Musculo skeletal system and soft tissue
    - (8) Trauma/Polytrauma
- 6) Principles of Surgery
- a) Knowledge of the General principle of the practice of Surgery
    - i) Imaging techniques/interventional Radiology
    - ii) Endoscopy/Laproscopy
    - iii) Surgery at extremes of life
    - iv) Theatre techniques
      - (1) Aseptic techniques – sterilization
      - (2) Anaesthesia in general, maintenance of homeostasis
      - (3) Basic techniques – suturing material dressing plaster
      - (4) Diathermy
      - (5) Tourniquet
    - v) Wound healing, dehiscence, scar, contractures
    - vi) Post operative complication and management
    - vii) Sepsis in surgery
      - (1) Acute and Chronic, inflammation
      - (2) Wound infliction and septicemia
      - (3) Sp, infection, TB, Leprosy, AIDS, Bacterial infection
      - (4) Antiseptic, Antibiotic policies
- 7) Operation Surgery
- a) Nervous System
    - i) Exposure to extra dural haematoma
    - ii) Skull traction
    - iii) Nerve repair and transplant
    - iv) Trauma –skull, spine
  - b) Respiratory System
    - i) F.B. in respiratory tract
    - ii) Tracheostomy, Laryngostomy
    - iii) Chest Drainage

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- iv) Thoractomy
- v) Chest trauma (variety of injuries)
- c) Cardiovascular
  - i) Cardio temponand
  - ii) Exposure to artery and vein, embolectomy
  - iii) Amputations
- d) Gastrointestinal System
  - i) All type of GI Surgery of all magnitude and types
  - ii) Different combination of operation
    - (1) Except- transplantation
- e) Genito urinary system
  - i) Suprapublic bladder drainage
  - ii) Cystoscopy
  - iii) Exposure of kidney, calculus, obstructive uropathy
  - iv) Perinephric abscess
  - v) Scrotal/testicular operation
  - vi) Ectopic pregnancy/other pelvic surgery
- f) Endocrine and breast
  - i) Thyroid/parathyroid
  - ii) Breast surgery (no reconstruction)
- g) Musculo skeletal and soft tissue
  - i) Simpe skeletal traction
  - ii) Compartmental syndrome
  - iii) Bone infection
- h) Plastic
  - i) Simple deft lip repair
  - ii) Skin grafting/flaps
  - iii) Skin lesion
  - iv) Lymphnode and biopsy
- i) Other
  - i) Venesection central line
  - ii) Laryngoscope, ET intubation
  - iii) FNAC/trucut needle biopsy
  - iv) Defibrillation
- 8) Recent advance
  - a) Research-inside country
  - b) Recent advance – international
  - c) Not published research work
  - d) Future national vision