Surgery & Allied Subjects

Final professional Examinations:
Marks distribution for assessment of surgery
Total marks Surgery and allied Subjects – 500

- Written = 200 (Formative Assessment-20 +(MCQ- SBA & MTF) 40+ (SAQ +SEQ) 140 =200)
- Structured Oral = 100 (60+20+20)
- Clinical = 100 (60+20+20) • Practical (OSPE/OSCE) = 100 (60+20+20) Total in Surgery and allied---500.

Course Contents in Surgery

Contents
CORE ***Phase II*** 1. History, evolution and scope of surgery 2. Approach to a surgical patient 3. Surgical diagnostic process and techniques 4. Surgical Infection (Boil, Furuncle, Abscess, Carbuncle, cellulites) 5. Septicemia (causes, complications and treatment) 6. Sinus, Fistula and cysts 7. Wounds (classification and management) 8. Ulcers, pressure sores 9. Groin hernias 10. Hemorrhage 11. Shock Phase III 12. Metabolic response to injury 13. Principles of Management of Trauma 14. Management of a severely injured patient 15. Fluid and electrolytes balance 16. Enteral and Parenteral nutrition Phase IV 17. Pre operative assessment and preparation 18. Tumors of skin 19. Lymphadenopathy (causes, investigations, diagnosis, biopsy) 20. Surgical ethics ***ADDITIONAL*** Organ transplantation, Robotics in surgery
Contents
CORE **Phase II** Complications of Peptic ulcer (Perforation, Pyloric stenosis) Upper G.I. Tract bleeding Appendicitis Intestinal obstruction;

Phase III

Abdominal trauma (Diagnostic and Management principles)

Ruptured Spleen
Ruptured liver
Ruptured intestine

Phase IV

Tongue, Lip & other oral lesions (ulcer, cancer)
Oesophagus
Carcinoma oesophagus and stricture
Carcinoma stomach Neoplasm of colon and rectum
Intestinal tuberculosis
Anal canal Hemorrhoids, Fistula, Sinus & Fissure, Carcinoma anus
Colostomy & ileostomy (indications and management)

Abdominal incisions (Tutorial)

ADDITIONAL

Intra-abdominal abscess
Diseases of salivary glands
Hiatus hernia.

Contents

CORE

Phase III

1. Urinary symptoms & definitions
2. Urological investigations and their interpretations,
3. Developmental Genito-urinary anomalies
4. Scrotal swelling

- Hydrocele
- Scrotal cellulitis

5. Acute scrotal conditions

- Epididymis- orchitis
- Torsion testis

Phase IV

6. Urolithiasis (Causes, Diagnosis, Principles and modalities of treatment)
7. Retention of urine (acute and chronic
8. Hydronephrosis
9. UTI
10. Urinary tract injury.

- Renal injury
- Urethral injury

11. Renal Neoplasm
- RCC
- Wilm's Tumor

12. Testicular Tumour
13. BPH
14. Stricture urethra

ADDITIONAL
- Male infertility
- Minimal Invasive Surgery in Urology

CORE

Phase II

Cholelithiasis (causes and complications)
Cholecystitis (acute & chronic)
Pancreatitis (acute pancreatitis)

Phase IV

Obstructive jaundice
Pancreatic tumors
Liver abscess

ADDITIONAL

Hepatic neoplasm
Cysts of liver
Neoplasm of Gall Bladder

CORE

Phase IV

Thyroid

Goiter and Neoplasms of thyroid

Breast

Breast pain, Mastitis and Breast Abscess Fibro-adenosis and Fibroadenoma Carcinoma of breast

ADDITIONAL

Diseases of adrenal gland
Diseases of Parathyroid gland

CORE

Phase IV

Chest injury (Hemothorax, Pneumothorax)
Chest tumors, Chest drain,

ADDITIONAL

Dysphagia
Empyema thoracis

CORE

Phase III
Vaso occlusive disorders Atherosclerosis, Buerger's disease Varicose vein Thrombophlebitis Deep vein thrombosis

ADDITIONAL
Pulmonary embolism
Angioplasty, CABG and cardiac surgery

Core
Phase IV
Burn (Causes, complications and management) Skin grafting Skin tumors, Special area burn , Inhalation and electric burn.

Contents
CORE **Phase IV** Head injury ICSOL PLID Paraplegia/hemiplegia **ADDITIONAL** Hydro Cephalus Tumors of brain Tumors of spinal cord
CORE **Phase III** Principles of Asepsis & Antisepsis Pre-operative assessment & preparation Venus's access Circumcision Operation for hydrocele Repair of D.U perforation Wound care ***Tutorials*** Universal precautions (Scrubbing, gloving & gowning) O.T. environment & behavior Preoperative skin preparation and draping Suturing materials, Stitches
Phase IV Common Abdominal incision Operation for inguinal hernia Drainage of abscesses Catheterization, Supra-pubic cystostomy Anastomosis Appendicectomy Cholecystectomy

Gastrojejunostomy
Basic principles of Laparoscopy.

Additional
Thyroidectomy, Nephrectomy, Mastectomy / Prostatectomy

CORE
Phase III
a) General Orthopedics

- Introduction to orthopedics
- Hard tissue trauma: -
  -Fracture classification
  -Principal of management of open and closed facture
  -Fracture healing –nonunion, malunion, delayed union.
- Infection of bone (Acute and chronic osteomyelitis)

Phase III
b) Regional orthopedics
Upper limb
Colles' fracture Supracondylar fracture
Clavicle fracture
Radius Ulna fracture (Shaft)
Homarus fracture (Shaft)
Lower limb
Fracture of Shaft of femur
Fracture of Tibia fibula

Phase IV
Regional Orthopedics

- Upper Limb Hand injuries and Hand Infection
- Lower Limb Fracture of Neck of femur Fracture of Pelvis Ankle and foot injuries Amputations
- **Additional**

Dislocation – Hip, Hemarthrosis

- Soft tissue trauma (muscle and tendon injuries, compartmental syndrome)
- Infection of joint including osteoarticular tuberculosis
- Mass Casualty- ATLS, Disaster management.
- Bone tuberculosis

Additional
a) Dislocation of shoulder and elbow
b) Pediatric orthopedics: Congenital anomalies-talipes, DDH, Bow legs, Polydactyly, Claw
c) Bone tumors: Classification of bone tumor Common benign and malignant bone tumor – osteochondroma, Giant cell tumor, Osteosarcoma, Metastatic bone tumor.
Vertebral fracture – (primary management, transportation. Principles of definitive management)

Additional
d) Tendinitis, Tenosynovitis, bursitis.

Phase III

CORE

a) Anesthesia as a subject: its scope, outline- present & future
b) Anesthesia Pharmacology: Drugs: induction, maintenance, muscle relaxants
c) Intra-operative management
d) Post-operative management and complication
e) General GAnes (G.A)
f) Local/Regional anesthesia
g) Management of Pain (chronic)
h) Intensive Care Unit (ICU)
i) Basic life support.
j) Cardio-Pulmonary Resuscitation (CPR)

Exposure to practical procedures (Tutorial) :

- Pre-operative assessment
- Induction
- Endo tracheal Intubation
- CV line
- Artificial ventilation
- Face mask ventilation.
- Recovery room experience

CORE

Phase IV

- Introduction of radiology & imaging including CT & MRI
- Hazards of radiation and protection for personals, and patients.
- Principles of ultra-sonography & its clinical application
- Plain & contrast X-Rays
- Interventional imaging
- USG

CORE:

- Normal and pathological image
- Pneumonic and Tuberculous consolidation
- Pleural effusion
- Pneumo Thorax

Additional

- Lung abscess
- Mediastinal mass

Contents

Core:

- Plain X-ray findings of Acute abdomen.
- Indications & contraindications for barium studies. Hepatobiliary system Cholangiogram & ERCP
- USG of HBS and Pancreas

Additional:

MRCP

CORE

- Diagnosis of common fractures of upper and lower limb
- skull fractures
- Spinal fractures and caries spine
- Acute osteomyelitis
- common bone tumors
- diseases of joints
- dislocations

CORE

- X-ray KUB & IVU
- USG of Kidney, Ureter, Bladder and prostate

Phase IV

CORE

Introduction to Radiotherapy

Radiation oncology, basic principles and practices:

- Aims of radiation oncology
- Sources of radiation, Isotopes and their mechanism of action
- Curative/Palliative radiotherapy
- Radiosensitivity, radio resistance, radio curability and normal tissue tolerance.
- Common radiation reactions and management.

Medical oncology, basic principles and practice:

- Cell cycle and Mechanism of action of cytotoxic drugs
- Clinical aspect of cancer chemotherapy
- Complications of chemotherapy (Infection and bleeding tendency)
- Chemotherapy of common cancers,
- Common Chemotherapeutic regimes

Prevention of common cancer:

- Primary prevention, Secondary prevention
- Early diagnosis
- Referral to appropriate center

Palliative support and terminal care:

- Follow-up of cancer patients and terminal care

Nuclear Medicine, basic Principles and practice:

- Radio-isotope in diagnosis
- Radio-isotope in therapy

CORE

Phase III

- Examination of a child and neonate (Special considerations)
- Infantile Inguino scrotal swellings
- Acute abdomen in infants & children
- Congenital hypertrophic pyloric stenosis

Phase IV

- Neonatal/Infantile intestinal obstruction
- Intussusception
- Anorectal malformations.
- Maldescended Testis
- Torsion Testis
- Haemangioma and other Cutaneous lesions
- Child-hood tumours.
- Rectal bleeding and prolapsed rectum

Tutorials

- Cystic hygroma, Branchial fistula
- Phimosis/balanitis
- Paraphimosis
- Phimosis/balanitis
- Paraphimosis