

Syllabus for the post of

- (1) Professor, General Surgery, Class-I (Advt. No.: 45/2019-20) (Special Recruitment)
- (2) Professor, General Surgery, Class-I (Advt. No.: 46/2019-20) (General Recruitment)
- (3) Associate Professor, General Surgery, Class-I (Advt. No.: 61/2019-20) (Special Recruitment)
- (4) Assistant Professor, General Surgery, Class-I (Advt. No.:84/2019-20) (Special Recruitment)

Marks – 200

Questions – 200

Medium - English

1. Applied Basic Sciences include applied anatomy, physiology, biochemistry, microbiology, pathology and Pharmacology.

2. General Surgical Topics;

- History of Surgery
- Fluids and Electrolyte balance/ Acid – Base metabolism
- Wound Healing and Wound Management
- Pathophysiology and Management of Shock
- Principles of Operative Surgery: Asepsis, Sterilization and Antiseptics
- Surgical Infections and Antibiotics
- Nutrition and Metabolism
- Principles of Burn Management
- Principles of Oncology
- Principles of Laparoscopy and Endoscopy
- Haemostasis, Blood Transfusion
- Trauma: Assessment of polytrauma, triage, basic and advanced trauma
- Basic Principles of Anaesthesia
- Informed Consent and Medicolegal Issues
- Organ Transplantation
- Molecular Biology and Genetics
- Hernias: Types of hernias, repair techniques
- Breast Diseases: Benign breast disorders, investigations, screening, genetics, Breast Cancer
- Thyroid Disorders: Solitary nodule, investigations, multinodular goitre, Graves disease, malignancies

3. PERI-OPERATIVE MANAGEMENT - 1

- Pre-operative Management
- Infection
- Investigative and Operative Procedures

- Anaesthesia
- Theatre Problems

4. PERI-OPERATIVE MANAGEMENT - 2

- Skin and Wounds
- Fluid Balance
- Blood
- Post-operative Complications
- Post-operative Sequelae

5. TRAUMA

- Initial Assessment and Resuscitation after Trauma
- Chest, Abdomen and Pelvis
- Central Nervous System Trauma
- Special Problems
- Principles of Limb Injury

6. INTENSIVE CARE

- Cardiovascular
- Respiratory
- Multisystem Failure
- Problems in Intensive Care
- Principles of ICU

7. NEOPLASIA: TECHNIQUES AND OUTCOME OF SURGERY

- Principles of Oncology
- Cancer Screening and Treatment
- Techniques of Management
- Ethics and the Law
- Outcome of Surgery

8. LOCOMOTOR SYSTEM

Musculo-skeletal anatomy and physiology relevant to clinical examination of the locomotor system and to the understanding of disordered locomotor function, with emphasis on the effects of acute musculoskeletal trauma.

- Effects of Trauma and Lower Limb
- Infections and Upper Limb
- Bone Disease and Spine

9. VASCULAR

The surgical anatomy and applied physiology of blood vessels relevant to clinical examination, the interpretation of special investigations and the understanding of the role of surgery in the management of cardiovascular disease

- Arterial Diseases
- Venous Diseases
- Lymphatics and Spleen

10. ABDOMEN

The surgical anatomy of the abdomen and its viscera and the applied physiology of the alimentary system relevant to clinical examination, the interpretation of common special investigations, the understanding of disorders of function, and the treatment of abdominal disease and injury.

- Abdominal Wall
- Abdominal injury
- Acute Abdominal Conditions

11. SMALL BOWEL AND COLORECTAL DISORDERS

- Neoplasms of large bowel
- Inflammatory bowel disease (inc. medical management)
- Diverticular disease
- Irritable bowel syndrome
- Haemorrhoids
- Anal fissure
- Rectal prolapse
- Acute appendicitis/RIF pain
- Intestinal obstruction
- Intestinal pseudo-obstruction
- Intestinal ischaemia
- Peritonitis
- Large bowel and rectal injuries
- Anal tumours
- Pelvic autonomic nerves
- Screening for colorectal cancer
- Genetics of colorectal cancer
- Place of radiotherapy and chemotherapy in treatment
- Anorectal physiology
- Anorectal ultrasound
- Faecal incontinence
- Chronic constipation
- Intestinal fistulae
- Colonic bleeding
- Radiation enterocolitis
- Other small bowel conditions
- Colonic obstruction
- Colonic perforation

12. LAPAROSCOPIC SURGERY

- Laparoscopic anatomy of the abdomen
- Diagnostic laparoscopy
- Physiology of pneumo-peritoneum Dangers of pneumoperitoneum
- Principles of diathermy
- Informed consent for laparo-scopic procedures
- Pre and post operative management of laparoscopic cases
- Port complications
- Technology of video imaging, cameras, insufflator etc.
- The methods of manipulation of images
- Laparoscopic instruments, clips, staplers and port types
- Management of equipment failure
- Ultrasound interpretation, internal and external techniques
- Recognition and management of laparoscopic complications
- Use and dangers of diathermy
- Anaesthetic problems in laparoscopic surgery
- Medico-legal implications of video-endoscopic surgery
- Theory and practice of cholecho-scopy
- Theory of different forms of diathermy
- Laparoscopic ultrasound
- Advanced instrumentation and equipment
- Endoscopic suturing devices
- Theory, uses and dangers of lasers and other energy sources e.g. harmonic scalpel
- Creation and maintenance of new endoscopic spaces
- Use of assistance robots and robotic instruments

13. TRANSPLANTATION with special reference to RENAL AND HEPATIC DISEASE

- Pathology of renal and hepatic disease
- Patho-physiology of renal and hepatic failure
- Peritoneal- and haemo-dialysis
- Management of fluid and electrolyte disorders
- Selection of patients for transplantation
- Post-operative management
- Management of rejection
- Opportunist infections
- Transmission of viral and fungal diseases
- Tissue typing
- Bladder dysfunction
- Immuno-pathology of rejection
- Immunosuppression
- Immunosuppression and cancer
- The HLA system

14. HEPATOPANCREATOBILIARY SURGERY

- Gallstones and complications
- Biliary stricture
- Obstructive Jaundice
- Neoplasms of the Liver, Biliary Tract and Pancreas
- Pancreatitis, acute and chronic, complications
- Liver injuries
- Portal Hypertension
- Hydatid disease
- ESRD and Liver transplantation

15. UPPER GI TRACT

- Neoplasms of the upper GI tract
- Management of perforations of the upper GI tract
- Management of intestinal obstruction
- Management of GI bleeding
- Oesophageal motility disorders
- Oesophageal Strictures
- Gastro-oesophageal reflux and its complications
- Peptic ulceration and its complications
- Radiation enteritis
- Abdominal trauma
- Principles of screening for cancer
- The use and limitations of multimodality treatment for upper GI cancer
- Oesophageal motility disorders
- Other small bowel conditions
- Principles of Small bowel resection
- Sutured and stapled anastomoses
- Urinary Tract
- Urinary tract infection.
- Urinary Tract Obstruction
- Haematuria.
- Trauma to the urinary tract.
- Urinary calculi.
- Retention of urine.
- Urinary tract Neoplasms
- Disorders of prostate.
- Pain and swelling in the scrotum.
- Other Scrotal Lesions
- Testicular Neoplasms

16. NEUROSURGERY

- Cranial, spinal and peripheral nerve tumours
- Head Injury
- Spinal and peripheral nerve injuries
- Hydrocephalus
- Cerebrovascular Accidents
- Infections
- Recent advances

17. Cardiac and Thoracic Surgery

- Myocardial revascularisation
- Valvular Disorders
- Peripheral vascular disease
- Renovascular disease
- Secondary Hypertension
- Inflammatory Lung Disease
- Chest Wall lesions
- Thoracic Neoplastic Disease
- Chest Trauma
- Pleural Diseases

18. Orthopaedics

- Principles of Orthopaedic Trauma
- Nerve injuries
- Principles of Traction
- Principles of Rehabilitation
- Bone and Joint Infections
- Casts and braces
- Hand Infections
- Amputations
- Congenital Lesions

19. Procedures

- Basic Ward Procedures
- ICU Procedures
- Minor Surgical Procedures
- Emergency Room Procedures
- Major Operative Procedures

20. HEAD, NECK, ENDOCRINE AND PAEDIATRIC

- The Head
- Neck and Endocrine Glands
- Paediatric Disorders
- ABDOMEN
- Reconstructive Surgery
- Colorectal
- Laparotomy for acute abdomen

21. RESEARCH METHODOLOGY.

22. MEDICO LEGAL ASPECTS RELEVANT TO THE DISCIPLINE.

23. INDIAN MEDICAL COUNCIL (PROFESSIONAL CONDUCT, ETIQUETTE AND ETHICS) REGULATIONS, 2002.

24. CURRENT TRENDS AND RECENT ADVANCEMENTS IN THE FIELD OF GENERAL SURGERY.