

**DETAILED SYLLABUS FOR THE POST OF ASSISTANT PROFESSOR  
IN ANAESTHESIOLOGY  
MEDICAL EDUCATION**

(Category No.: 234/2021)

- History of Anaesthesiology
- Basic sciences related to Anaesthesiology (Anatomy, Physiology, Pharmacology, Microbiology, Pathology, and Genetics)
- Medicine applied to Anaesthesiology
- Physics related to Anaesthesiology
- Biostatistics, research methodology
- Evidence based Medicine in Anaesthesiology
- Computer basics, internet
- Medical Record keeping & audit
- Uptake and distribution of Anaesthetic gases
- Equipments used in anaesthesia
- Medical gas plant & pipeline system
- Drugs & Gases used in Anaesthesia
- Medico legal aspects of Anaesthesia
- Pre Anaesthetic evaluation, preparation & Perioperative care
- General Anaesthesia including Endotracheal Anaesthesia
- Regional Anaesthesia
- Local Anaesthesia & Nerve blocks
- Intravenous Anaesthesia
- Outpatient Anaesthesia
- Obstetric analgesia
- Accidents, complications & sequelae of Anaesthesia
- Anaesthesia outside operation room
- Acid Base balance
- Fluid & Electrolyte balance
- Blood & blood products
- Airway management & resuscitation
- Cardiopulmonary resuscitation
- Critical care management
- Trauma management
- Oxygen & respiratory therapy
- Sterilization & care of operation theatre & equipments
- Safety of operation theatre environment
- Acute & chronic pain therapy
- Palliative care
- Disaster management
- Communication & Teaching skills
- Updating of recent advances in Anaesthesiology
- Anaesthetic management of Organ Transplantation
- Scope of Modern Anaesthetic practice

- Teaching Anaesthesia
- Sub specialty Anaesthetic management
- Ancillary problems and responsibilities
  
- Basic Graduate skills:
  - Insertion of IV lines
  - Insertion of Nasogastric tube
  - Monitoring vital signs
- Anaesthesia Skills:
  - Basic airway management
  - Difficuly airway management
  - Orotracheal / Nasotracheal intubation
  - Airway equipments
  - Local anaesthesia
  - Regional Anaesthesia
  - Neuraxial blockade
  - Intravenous Regional Anaesthesia
  - Total intravenous Anaesthesia
  - Monitored Anaesthesia Care
  - General Anaesthesia
  - Perioperative monitoring
- Critical Care procedures:
  - Airway Management (Cricothyrotomy, tracheostomy)
  - Fibreoptic bronchoscopy
  - Arterial cannulation
  - Central venous cannulation
  - Pulmonary artery catheterisatiion
  - Sampling & interpretation of ABG
  - Fluid & Electrolyte management
  - Ventilatory care
  - Intercostal drainage
  - Intensive Care Therapy
  - Ultrasound and echo in ICU
- Emergency room procedures:
  - Management of airway obstruction
  - Cardiopulmonary resuscitation (BLS & ACLS)
  - Management of cardiac failure
  - Management of respiratory failure
  - Management of shock
- Pain Therapy:
  - Common modalities of acute & chronic pain therapy
  - Perioperative pain management
  - Labour analgesia
  - TENS
  - PCA

- Common nerve blocks
- Neurolytic & nerve ablation procedures
- Psychological aspects of pain therapy
- Palliative care

**NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.**