VOT-302 Principles of Anesthesia

Objective - Student will understand the importance and use of anaesthesia in OT techniques and learn about the Breathing system.

UNIT - 1 **INTRODUCTION TO ANAESTHESIA** •General Anaesthesia * Regional Anaesthesia* Local Anaesthesia * Intravenous Anaesthesia • Minimum standard of anaesthesia

Medical gas supply: Compressed gas cylinders, Colour coding, Cylinder valves; pin index. gas piping system, recommendations for piping system, alarms & safety devices, anaesthesia machine, hanger and yoke system, cylinder pressure gauge, Pressure regulator, flow meter assembly, vaporizers - types, hazards, maintenance, filling and draining, etc.

UNIT - 2 **Breathing system**: general considerations: humidity & heat, common components - connectors, adaptors, reservoir bags, capnography, Pulse oximetry, methods of humidification, classification of breathing system, Mapleson system, Jackson Rees system, Bain circuit, non- rebreathing valves - ambu valves, the circle system, components, Soda lime, indicators, face mask and airway laryngoscopes- types, sizes, endotracheal tubes - types, sizes, cuff system, fixing, removing and inflating cuff, checking tube position complications.

UNIT - 3 **Anaesthesia, ventilator and working principles**: Pre anaesthetic assessment~ History – past history disease/ Surgery / and personal history Smoking / alcohol General physical assessment, systemic examination – CVS, RS, CNS and monitoring of: ECG, Sp02, temperature, IBP, CVP, PA Pressure, LA Pressure.

Recommended Books:

- Oxford Handbook of Anaesthesia
- Anaesthesia, Pharmacology, Intensive Care and Emergency