



**GOVERNMENT OF KERALA  
DIRECTORATE OF MEDICAL EDUCATION  
DIPLOMA IN OPERATION THEATRE & ANESTHESIA TECHNOLOGY COURSE  
REGULAR & SUPPLEMENTARY EXAMINATIONS APRIL 2024**

**DOTAT-S-I-APR-2024**

Time -3hrs.

**PAPER-I**

Max.marks: 100

**BASIC SCIENCES INCLUDING PHARMACOLOGY  
(Answer Section A & B separately, draw diagrams wherever necessary)**

**SECTION –A**

- I. Write Short notes on : (10x5=50)
- a. Anatomy of Tracheo Bronchial Tree
  - b. Compare between Thiopentone sodium & Ketamine
  - c. Desflurane
  - d. Mallampati Grading
  - e. Bupivacaine
  - f. Nitrous oxide
  - g. Role of a technician in Radial Artery Cannulation
  - h. HME Filter
  - i. Colloids used in Operation Theatre
  - j. Patient Warmer

**SECTION-B**

- II. Write shorts notes on: (10x5=50)
- a. Tramadol
  - b. Blood grouping
  - c. Femoral Artery Cannulation
  - d. Anatomy of Sub arachnoid Space
  - e. ETCO<sub>2</sub> monitoring
  - f. Vapourizer
  - g. Formation sterilization
  - h. Midazolam
  - i. Videolaryngoscope
  - j. Miller's Laryngoscope





**GOVERNMENT OF KERALA  
DIRECTORATE OF MEDICAL EDUCATION  
DIPLOMA IN OPERATION THEATRE & ANESTHESIA TECHNOLOGY COURSE  
COURSE REGULAR & SUPPLEMENTARY EXAMINATIONS- APRIL 2024**

Time -3hrs.

**PAPER-II**

**DOTAT-S-II-APR- 2024**

Max.marks: 100

**BIOMEDICAL EQUIPMENTS  
(Answer section A & B separately, draw diagrams wherever necessary)  
SECTION-A**

- I. Write short notes on :** **(10x5=50)**
- a. Oesophageal Stethoscopy
  - b. Enumerate different methods of blood pressure measurement. What is Sphygmomanometry.
  - c. Name the different type of humidifiers and describe briefly heat and moisture exchanger.
  - d. Complications of subclavian vein cannulation?
  - e. Uses of pulmonary Artery Catheterisation.
  - f. Enumerate different lung volumes and capacities. Write shortly on FRC.
  - g. Vaporisers with electronic control – Enumerate and describe the parts.
  - h. Function of a modern work station.
  - i. Thermocouple
  - j. Arterial blood gas analysis.

**SECTION-B**

- II. Write short notes on :** **(10x5=50)**
- a. Co-oximetry
  - b. Boyle's Law
  - c. Avogadro's Law
  - d. Endobronchial Tubes
  - e. Hazards in operation theatre
  - f. Disadvantages of Double Lumen Tube
  - g. Anesthesia Ventilators
  - h. Soda lime
  - i. Nasopharyngeal Airways
  - j. Enumerate different methods of sterilization of anesthesia equipments.

.....



**GOVERNMENT OF KERALA  
DIRECTORATE OF MEDICAL EDUCATION  
DIPLOMA IN OPERATION THEATRE AND ANAESTHESIA TECHNOLOGY  
REGULAR & SUPPLEMENTARY EXAMINATIONS APRIL 2024**

**DOTAT-S-III-APR-2024**

Time -3hrs.

**PAPER-III**

Max.marks: 100

**OPERATION THEATRE AND ANAESTHESIA TECHNIQUES  
(Answer sections A & B separately, draw diagrams wherever necessary)**

**SECTION-A**

**I Write short notes on :** **(10x5=50)**

- a. Oxygen failure safety devices
- b. AMBU bag
- c. Prone position
- d. Oro/Nasal Air way
- e. Ryle's tube
- f. Antistatic techniques in anaesthesia equipments
- g. BLS algorithm
- h. Autoclave – Techniques, what all organisms are destroyed by this method?
- i. TEC-6 vaporizer
- j. Isoflourane

**SECTION B**

**II. Write short notes on:** **(10x5=50)**

- a. Suction apparatus
- b. Mechanism of Cautery machine – Monopolar / Bipolar with the help of diagrams
- c. CO2 Cylinder – Cylinder pressures, different uses. How is safe intra abdominal pressure maintained in laparoscopy ?
- d. Non invasive Blood pressure monitoring – setting the monitor for anaesthesia.
- e. Safety precautions in Laser treatment inside Operating room.
- f. Positioning of patients for Central line insertion
- g. Preparation for sending request for Arterial blood gas analysis-
- h. Sterilization of Fiber optic bronchoscope
- i. Advantage and disadvantage of Monopolar and Bipolar cautery in patients
- j. Filling systems in vapourisers

.....