

**DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY
SECOND YEAR
PAPER I – APPLIED PHYSIOLOGY & PHARMACOLOGY**

Q.P. Code: 841111

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Classify Intravenous induction agents and write in detail about Thiopentone and Propofol.
2. Draw the tracheobronchial tree and name the parts. Describe the types of respiratory failure, causes and its management.
3. Define cardiac arrest. List the causes and management of cardiac arrest.

II. Write notes on:

(10 x 5 = 50)

1. Ropivacaine.
2. Sugammadex.
3. Transfer of gases in lungs.
4. Tracheal tug.
5. Vocal cord palsies.
6. Composition of body fluids.
7. Ondansetron.
8. Component therapy.
9. Composition of Ringers lactate and Dextrose normal saline.
10. Tramadol.

III. Short answers on:

(10 x 2 = 20)

1. Name four opioids.
2. Composition of air.
3. Normal value of body pH, PaO₂, PaCO₂.
4. Define Bradycardia and Tachycardia.
5. Blood supply of Brain.
6. Name four reversal agents.
7. Mention the toxic dose of Lignocaine and Bupivacaine.
8. Name five antiarrhythmic agents.
9. Oxygen Dissociation Curve.
10. MAC value of Isoflurane and Sevoflurane in air.