BSC ANS. March - 2025.

## **BLDE (DEEMED TO BE UNIVERSITY)**

### **B.Sc.** in Anaesthesia Technology

[Time: 3 Hours]

[Max. Marks: 80]

#### IV SEMESTER

# PAPER - I (Basic Techniques of Anaesthesia) OP CODE: 8450

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

### **Long Questions**

10X1 = 10 Marks

1. Describe how to prepare a patient for epidural anesthesia while on sitting position. Explain the drugs used in epidural anesthesia

### Short Essays: (Any - 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. Describe the medications and various adjuvants used in spinal anesthesia.
- 3. List the inhalational anesthetic agents used in the operating theater and include a note on Isoflurane.
- 4. Provide a concise overview of Propofol.
- 5. Briefly write a note on handwashing technique.
- 6. Compare the Laryngeal Mask Airway (LMA) with an endotracheal tube.
- 7. Steps of Basic Life Support (BLS).
- 8. Surgical safety checklist
- 9. Discuss the classification of spinal needles and provide examples.
- 10. Provide a detailed description of the components of an endotracheal tube with a clear, labeled diagram. Also, include an overview of different types of endotracheal tubes.

### Short Answers: (Any – 10)

- 11. Describe the different forms of lignocaine available.
- 12. What are the uses of Magill's forceps?
- 13. What are different positions in anesthesia
- 14. Classify supraglottic airway devices
- 15. Informed consent
- 16. Name three different types of nerve blocks used in the upper limbs.
- 17. Name 3 local anesthetic drugs.
- 18. Preoperative evaluation of patient prior to surgery.
- 19. Name the reversal agents
- 20. what are blood components
- 21. What is the Pin-Index Safety System? Provide some examples of its application.

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### IV SEMESTER

# PAPER - II (Medical Disease Influencing Choice of Anaesthesia) OP CODE: 8451

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

### **Long Questions**

10X1 = 10 Marks

1. Mention major endocrine glands in body? Enumerate diabetes mellitus with respect to signs and symptoms and etiology

### Short Essays: (Any – 8)

5 X 8 = 40 Marks

- 2. Name major electrolytes in body and their normal values
- 3. What is thyrotoxicosis and write its anesthetic implications
- 4. Metabolic acidosis.
- 5. Normal CSF flow
- 6. Liver function tests
- 7. Draw neat labelled diagram of bronchopulmonary segments
- 8. Hypertension classification and anesthetic implication
- 9. Child pugh classification
- 10. Renal function tests

### Short Answers: (Any – 10)

- 11. Mention different types of anemia
- 12. What is BMI classify obesity according to BMI
- 13. Hypoxia
- 14. What are common insulin preparation
- 15. What are complications of cirrhosis?
- 16. Mention 3 signs of liver failure
- 17. Hypokalaemia
- 18. Blood brain barrier.
- 19. What is bronchial asthma
- 20. What is hemoglobin mention its normal range
- 21. Signs and symptoms of meningitis

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### IV SEMESTER

# PAPER - III (Medicine Relevant to OT Technology) QP CODE: 8452

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

### **Long Questions**

10X1 = 10 Marks

1. What are inhalation agents used inside Operation theatre (OT)? explain in detail about sevoflurane

Short Essays: (Any - 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. Morphine explain mechanism of action, uses and side effects.
- 3. Explain about reversal agents.
- 4. Explain Lignocaine uses, different preparations and its side effects.
- 5. Classify diuretics. Add a note on furosemide.
- 6. Classify opioids and add a note on fentanyl.
- 7. Classify antihypertensive drugs.
- 8. What are different routes of drug administration
- 9. Atracurium
- 10. Hydrocortisone- dosages and uses

## Short Answers: (Any – 10)

- 11. Write 3 Uses of adrenaline
- 12. Write 3 Uses of ketamine
- 13. What are routes of administration of ketamine?
- 14. Uses of furosemide.
- 15. Dexamethasone uses and dosage.
- 16. Name premedication drugs
- 17. Uses of midazolam
- 18. Name 3 beta blockers.
- 19. Uses of glycopyrolate
- 20. What are side effects of succinyl choline?
- 21. Lumbar vertebral bodies

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[Time: 3 Hours]

[Max. Marks: 80]

### IV SEMESTER

# PAPER - IV (ATOT Directed Clinical Education II) OP CODE: 8453

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

### **Long Questions**

10X1 = 10 Marks

1. Give a brief overview of ischemic heart disease (IHD) and the preoperative evaluation of IHD patients.

### Short Essays: (Any – 8)

 $5 \times 8 = 40 \text{ Marks}$ 

- 2. Management of Hyperkalaemia
- 3. Status epilepticus
- 4. Pulmonary Function Test
- 5. Events in Neuromuscular Junction
- 6. Glomerular Filtration Rate
- 7. Distribution of body Fluids
- 8. Management of Diabetic ketoacidosis
- 9. Composition and function of Blood.
- 10. Diagrammatic representation of CSF circulation.

### Short Answers: (Any – 10)

- 11. Triple manoeuvre.
- 12. Juxtaglomerular Apparatus.
- 13. Trendelenburg Position
- 14. BMI
- 15. Chronic Kidney Disease Classification.
- 16. Furosemide
- 17. Uses of Mannitol
- 18. Hypermagnesemia
- 19. Oliguria
- 20. Informed Consent
- 21. Name 3 emergency drugs