

National Board of Examinations

Question Paper Name : Diploma Anaesthesiology Paper1
Subject Name : Diploma Anaesthesiology Paper1
Duration : 180
Total Marks : 100
Display Marks: No

Maximum Instruction Time : 0

Question Number : 1 Question Id : 32718736755 Consider As Subjective : Yes

Please write your answers in the answer booklet within the allotted pages as follows:-

Question Number	Answer to be attempted within	Question Number	Answer to be attempted within
Q. 1	Page 1-5	Q. 6	Page 26-30
Q. 2	Page 6-10	Q. 7	Page 31-35
Q. 3	Page 11-15	Q. 8	Page 36-40
Q. 4	Page 16-20	Q. 9	Page 41-45
Q. 5	Page 21-25	Q. 10	Page 46-50

1. a) Draw a neatly labeled diagram to show the distribution of ventilation and perfusion in a normal lung. [5]
b) Explain the surface anatomy relevant to performing central neuraxial blocks, including identification of key landmarks. [3+2]

Question Number : 2 Question Id : 32718736756 Consider As Subjective : Yes

- a) Describe the anatomy of coronary blood flow and its implications for anaesthesia. [3+2]
b) Describe the metabolic stress response to trauma, highlighting its key phases and physiological changes. [3+2]

Question Number : 3 Question Id : 32718736757 Consider As Subjective : Yes

- a) Describe the anatomy of neuromuscular junction and draw a labelled diagram of the same. [3+2]
b) Enumerate the patterns of neuromuscular stimulation used for NM monitoring during anaesthesia and write in short about any one of them. [2+3]

Question Number : 4 Question Id : 32718736758 Consider As Subjective : Yes

- a) Compare sevoflurane and desflurane with respect to MAC, blood-gas solubility, and their clinical applications in anaesthesia. [1+1+3]
b) Discuss the effect of liver function on anaesthetic drugs. [5]

Question Number : 5 Question Id : 32718736759 Consider As Subjective : Yes

- a) Discuss Boyle's Law and its application in anaesthesia. [5]
b) Explain the Venturi principle as applied to oxygen delivery devices. [5]

Question Number : 6 Question Id : 32718736760 Consider As Subjective : Yes

- a) Describe the safety features of a modern anaesthesia workstation. [5]
- b) What is low flow anaesthesia? Discuss its advantages and disadvantages. [2+3]

Question Number : 7 Question Id : 32718736761 Consider As Subjective : Yes

- a) What are the anaesthetic concerns for patients taking ACE inhibitors? [5]
- b) Define Hypoxic Pulmonary Vasoconstriction (HPV) and its physiological role during anaesthesia. [2+3]

Question Number : 8 Question Id : 32718736762 Consider As Subjective : Yes

- a) Discuss the limitations of pulse oximetry and suggest potential strategies to overcome them. [3+2]
- b) Describe the clinical uses of end-tidal CO₂ (ETCO₂) monitoring in ventilated patients and explain the phases of a normal capnography waveform. [3+2]

Question Number : 9 Question Id : 32718736763 Consider As Subjective : Yes

- a) ANOVA. [5]
- b) Define p-value and confidence interval. [2+3]

Question Number : 10 Question Id : 32718736764 Consider As Subjective : Yes

- a) Discuss informed consent in emergency anaesthesia. [5]
- b) Discuss the minimum monitoring standards required during anaesthesia. [5]