

National Board of Examinations

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

Maximum Instruction Time : 0

Question Number : 1 Question Id : 32718736975 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 well labelled diagram of the neuromuscular junction. [4]
- b) Enumerate any four techniques of neuromuscular monitoring. Write briefly about any one technique with special reference to its clinical indication. [2+4]

Question Number : 2 Question Id : 32718736976 Consider As Subjective : Yes

- a) What are the advantages and disadvantages of the closed breathing circuit? [5]
- b) Describe the Mapleson D circuit and give its functional analysis. [5]

Question Number : 3 Question Id : 32718736977 Consider As Subjective : Yes

- a) What are the anesthetic concerns of intra-operative hypothermia? [3]
- b) What are the mechanisms that lead to hypothermia during anesthesia? [4]
- c) Discuss the strategies for preventing intraoperative hypothermia. [3]

Question Number : 4 Question Id : 32718736978 Consider As Subjective : Yes

- a) Explain the physiology of ventilation-perfusion (V/Q) matching in the various zones of the lungs. [5]
- b) What happens to V/Q ratio during one lung anesthesia? [2]
- c) Discuss the effect of changes in functional residual capacity and dead space ventilation on ventilation perfusion matching. [3]

Question Number : 5 Question Id : 32718736979 Consider As Subjective : Yes

- a) What is power analysis and why is it important when designing a clinical trial? [4]
- b) What is the significance of P value? [3]
- c) What is a normal distribution curve? [3]

Question Number : 6 Question Id : 32718736980 Consider As Subjective : Yes

- a) The importance of accurate and detailed anaesthesia documentation. [5]
- b) Role of audit and feedback in anaesthesia practice. [5]

Question Number : 7 Question Id : 32718736981 Consider As Subjective : Yes

- a) Write briefly about the oxygen cascade with the help of a well labelled diagram. [3]
- b) What are the various techniques/devices used for oxygenation? [4]
- c) Apneic oxygenation. [3]

Question Number : 8 Question Id : 32718736982 Consider As Subjective : Yes

- a) What are the complications of massive blood transfusion? [6]
- b) Briefly discuss fibrinogen replacement therapy. [4]

Question Number : 9 Question Id : 32718736983 Consider As Subjective : Yes

- a) Buffer systems in the body. [5]
- b) Mechanism of action of local anaesthetics. [5]

Question Number : 10 Question Id : 32718736984 Consider As Subjective : Yes

- a) When does the neonatal pattern of circulation convert to an adult circulation in the pediatric patient? [4]
- b) What is transitional circulation and what are the intra-operative factors that can affect the conversion of a neonatal circulation to an adult circulation? [2+4]