

National Board of Examinations

Question Paper Name :	DrNB Cardiac Anaesthesia Paper1
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DrNB Cardiac Anaesthesia Paper1

Group Number :	1
Group Id :	3271872067
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Group Marks :	100
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

DrNB Cardiac Anaesthesia Paper1

Section Id :	3271872070
Section Number :	1
Section type :	Offline

Mandatory or Optional :	Mandatory
Number of Questions to be attempted :	10
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	3271872074
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 32718730474 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

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) Enumerate the various means of CNS monitoring during cardiac surgery. [4]
- b) Describe the utility BIS monitor in cardiac anaesthesia. [6]

Question Number : 2 Question Id : 32718730475 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

- a) Define "Ischemic preconditioning". [2]
- b) What is the underlying molecular basis? What are various important signaling pathways involved in preconditioning? [2+3]

c) Enumerate intravenous and inhalational anaesthetic agents providing ischemic preconditioning. [3]

Question Number : 3 Question Id : 32718730476 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

- a) What is the principle of continuity equation? [4]
- b) What are various methods used to calculate aortic valve area by Echocardiography? [6]

Question Number : 4 Question Id : 32718730477 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

- a) Define EUROSCORE. [2]
- b) What are the different patient factors which you routinely use while doing perioperative risk stratification of patient of coronary artery disease? [5]
- c) Enumerate various modalities of monitoring for ongoing myocardial ischemia for last two days and now planned for emergency CABG surgery. [3]

Question Number : 5 Question Id : 32718730478 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

Compare adult and infant cardiopulmonary bypass management. [10]

Question Number : 6 Question Id : 32718730479 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

What is the utility of conventional and modified ultrafiltration during cardiac surgery? [10]

Question Number : 7 Question Id : 32718730480 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

- a) Draw a diagram illustrating the anatomical landmarks used for the internal jugular vein cannulation. [4]
- b) Describe the technique of ultrasound guided CVP line insertion. [3]
- c) Discuss the complications while securing central venous line using internal jugular vein. [3]

Question Number : 8 Question Id : 32718730481 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

- a) What are the pathophysiological changes in one lung ventilation in lateral position? [6]
- b) Enumerate the various measures to improve oxygenation in patient suffering from desaturation while undergoing lobectomy? [4]

Question Number : 9 Question Id : 32718730482 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

- a) What is alpha stat and pH stat mode of blood gas management during DHCA? [6]
- b) Describe custodial (HTK) cardioplegia solution. [4]

Question Number : 10 Question Id : 32718730483 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

- a) Classify anti-arrhythmic agents. [5]
- b) Briefly describe indications, mechanism of action, dosage, outcome benefits of intravenous

hydroxocobalamine in cardiac surgery. [5]