

# National Board of Examinations

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| <b>Question Paper Name :</b>                   | DrNB PAEDIATRIC CRITICAL CARE Paper1 |
| <b>Subject Name :</b>                          | DrNB PAEDIATRIC CRITICAL CARE Paper1 |
| <b>Creation Date :</b>                         | 2023-10-15 14:11:41                  |
| <b>Duration :</b>                              | 180                                  |
| <b>Share Answer Key With Delivery Engine :</b> | No                                   |
| <b>Actual Answer Key :</b>                     | No                                   |

## DrNB PAEDIATRIC CRITICAL CARE Paper1

|                                      |            |
|--------------------------------------|------------|
| <b>Group Number :</b>                | 1          |
| <b>Group Id :</b>                    | 3271872107 |
| <b>Group Maximum Duration :</b>      | 0          |
| <b>Group Minimum Duration :</b>      | 180        |
| <b>Show Attended Group? :</b>        | No         |
| <b>Edit Attended Group? :</b>        | No         |
| <b>Group Marks :</b>                 | 100        |
| <b>Is this Group for Examiner? :</b> | No         |
| <b>Examiner permission :</b>         | Cant View  |
| <b>Show Progress Bar? :</b>          | No         |

## DrNB PAEDIATRIC CRITICAL CARE Paper1

|                         |            |
|-------------------------|------------|
| <b>Section Id :</b>     | 3271872110 |
| <b>Section Number :</b> | 1          |
| <b>Section type :</b>   | Offline    |

|   |            |
|---|------------|
| <b>Mandatory or Optional :</b>                                      | Mandatory  |
| <b>Number of Questions to be attempted :</b>                        | 10         |
| <b>Section Marks :</b>  | 100        |
| <b>Enable Mark as Answered Mark for Review and Clear Response :</b> | Yes        |
| <b>Maximum Instruction Time :</b>                                   | 0          |
| <b>Sub-Section Number :</b>   | 1          |
| <b>Sub-Section Id :</b>   | 3271872114 |
| <b>Question Shuffling Allowed :</b>                                 | No         |
| <b>Is Section Default? :</b>  | null       |

**Question Number : 1 Question Id : 32718721243 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. Discuss the pathophysiology of ischemia-reperfusion injury. Enumerate various biomarkers of endothelial activation. [6+4]

**Question Number : 2 Question Id : 32718721244 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

Briefly outline why antibodies against TNF alpha have not proved efficacious in controlled trials in the management of human septic shock. [10]

**Question Number : 3 Question Id : 32718721245 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

Briefly outline the gross anatomy observed when doing a general bronchoscopy in an intubated patient. Sketches may help to illustrate. [10]

**Question Number : 4 Question Id : 32718721246 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 and contrast the roles of parametric and non-parametric tests in analyzing data, including examples of types of data and appropriate tests. [10]

**Question Number : 5 Question Id : 32718721247 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 and contrast the pharmacology and pharmacokinetics of ketamine, fentanyl and dexmedetomidine when used for analgesia in the critically ill. [4+3+3]

**Question Number : 6 Question Id : 32718721248 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

Outline the approach to evaluate the etiology of metabolic acidosis in the critically ill child. Discuss approach to management of metabolic acidosis of various etiologies. [6+4]

**Question Number : 7 Question Id : 32718721249 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 a Standardized Mortality Ratio? What are the limitations of using this ratio to compare the performance of Intensive Care Units? [4+6]

**Question Number : 8 Question Id : 32718721250 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

Draw coagulation cascade and discuss the crosstalk between coagulation and inflammation. [4+6]

**Question Number : 9 Question Id : 32718721251 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

Describe the development of microbiome in children. Discuss the known and potential clinical consequences of Intensive Care Unit Dysbiosis. [4+6]

**Question Number : 10 Question Id : 32718721252 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

Discuss the effects of positive pressure ventilation on circulation. Draw graphs/diagrams where necessary. [10]