

National Board of Examinations

Question Paper Name :	DrNB PAEDIATRIC CRITICAL CARE Paper1
Subject Name :	DrNB PAEDIATRIC CRITICAL CARE Paper1
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DrNB PAEDIATRIC CRITICAL CARE Paper1

Group Number :	1
Group Id :	3271872889
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100

DrNB PAEDIATRIC CRITICAL CARE Paper1

Section Id :	3271872892
Section Number :	1
Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	100
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	3271872896
Question Shuffling Allowed :	No

Question Number : 1 Question Id : 32718734744 Question Type : SUBJECTIVE Consider As Subjective : Yes

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) Receptor trafficking during status epilepticus. [5]
- b) What is its implication in the clinical approach and management of status epilepticus? [5]

Question Number : 2 Question Id : 32718734745 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

- a) Explain correlation and regression in statistical methods. [4]
- b) How is a scatter plot drawn? [3]
- c) What is Bonferroni correction? [3]

Question Number : 3 Question Id : 32718734746 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

- a) Draw a schematic diagram of oxygen concentrator and explain the working principle. [4]
- b) Working principle of high flow oxygen therapy. [6]

Question Number : 4 Question Id : 32718734747 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

- a) Tools available for optimizing antimicrobial usage in PICU. [3]
- b) Draw and diagram and depict PK-PD (pharmacokinetic-pharmacodynamic) indices. [3]
- c) What is Vd (volume of distribution) of a drug and what are factors in critically ill patient that alter Vd? [4]

Question Number : 5 Question Id : 32718734748 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

- a) Hemostatic abnormalities in liver disease. [5]
- b) Potential dangers of isolated platelet transfusion in dengue. [5]

Question Number : 6 Question Id : 32718734749 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Composition, preparation and usage of cryo-precipitate. [10]

Question Number : 7 Question Id : 32718734750 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

- a) Methaemoglobinemia. [4]
- b) How does Pulse oximetry detect abnormal haemoglobins. [4]
- c) Explain saturation gap in methaemoglobinemia. [2]

Question Number : 8 Question Id : 32718734751 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

- a) Enumerate biochemical measures to assess nutritional monitoring. [5]
- b) Indices used to measure quality of care in PICU. [5]

Question Number : 9 Question Id : 32718734752 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Pathophysiology of cytokine release storm. [10]

Question Number : 10 Question Id : 32718734753 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Compare and contrast the pharmacology and pharmacokinetics of:

- a) Milrinone and levosimendan. [5]
- b) Clonidine and Dexmetomidine. [5]