

# National Board of Examinations

**Question Paper Name :** DrNB CRITICAL CARE MEDICINE Paper1  
**Subject Name :** DrNB CRITICAL CARE MEDICINE Paper1  
**Duration :** 180  
**Total Marks :** 100  
**Display Marks:** No

**Maximum Instruction Time :** 0

**Question Number : 1 Question Id : 32718740514 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. Microcirculatory dysfunction in the development of organ failure in critical care:

- In patients with sepsis. [5]
- In patients with poisoning. [5]

**Question Number : 2 Question Id : 32718740515 Consider As Subjective : Yes**

Acute respiratory distress syndrome (ARDS):

- Its impact on the renal system. [5]
- Its impact on the cardiovascular system. [5]

**Question Number : 3 Question Id : 32718740516 Consider As Subjective : Yes**

Discuss the therapeutic drug monitoring (TDM) of vancomycin in critically ill patients. Discuss its rationale, target levels, and factors influencing its pharmacokinetics. [5+(1+1+3)]

**Question Number : 4 Question Id : 32718740517 Consider As Subjective : Yes**

Discuss the utility of POCUS in the evaluation of dyspnoea in the emergency department. Write the specific findings that can guide management. Make different diagrams for specific findings. [3+2+5]

**Question Number : 5 Question Id : 32718740518 Consider As Subjective : Yes**

Comparative technology, functional mechanism and therapeutic utility of different types of dialysis used in the critical care units. [4+3+3]

**Question Number : 6 Question Id : 32718740519 Consider As Subjective : Yes**

Describe the stratified random sampling technique with an example and explain how it differs from cluster sampling. Provide an example scenario where stratified random sampling would be preferred over cluster sampling. [5+5]

**Question Number : 7 Question Id : 32718740520 Consider As Subjective : Yes**

An administrative review of a critical care unit identifies a high rate of medical errors related to medication administration. From an administrative viewpoint, what are the potential non-clinical interventions that could be implemented to address this issue? [10]

**Question Number : 8 Question Id : 32718740521 Consider As Subjective : Yes**

What are the key professional skills that improve communication and interaction with the family members of the patient in the critical care setup during a crisis? [10]

**Question Number : 9 Question Id : 32718740522 Consider As Subjective : Yes**

Explain the difference between a Type I and a Type II error in the context of a hypothesis test. Provide a clinical example for each. [6+4]

**Question Number : 10 Question Id : 32718740523 Consider As Subjective : Yes**

Explain the primary purpose of a Root Cause Analysis (RCA) in a patient safety context. Describe the limitations of using RCA to prevent future errors. [5+5]