

# National Board of Examinations

<b>Question Paper Name :</b>	DNB Physiology Paper2
<b>Subject Name :</b>	DNB Physiology Paper2
<b>Creation Date :</b>	2023-10-15 14:13:50
<b>Duration :</b>	180
<b>Share Answer Key With Delivery Engine :</b>	No
<b>Actual Answer Key :</b>	No

## DNB Physiology Paper2

<b>Group Number :</b>	1
<b>Group Id :</b>	3271872579
<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

## DNB Physiology Paper2

<b>Section Id :</b>	3271872582
<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>	3271872586
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

**Question Number : 1 Question Id : 32718726273 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. Describe the mechanism of transport of oxygen from the lungs to the tissues. Add a note on the physio-clinical significance of  $P_{50}$ . [7+3]

**Question Number : 2 Question Id : 32718726274 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:

- Propulsive and mixing movements in gastrointestinal tract. [4]
- Pre-hepatic and Post hepatic jaundice. [3]

c) Secretory and Osmotic diarrhea. [3]

**Question Number : 3 Question Id : 32718726275 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) Pressure gradients and flow in the coronary vessels during various phases of the cardiac cycle.

[4]

b) Factors affecting coronary vascular resistance. [4]

c) Myocardial hibernation and stunning. [2]

**Question Number : 4 Question Id : 32718726276 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 reflex mechanisms for maintaining normal arterial pressure. [10]

**Question Number : 5 Question Id : 32718726277 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) Renal handling of glucose. [3]

b) Diluting segments of the nephron. [3]

c) Role of kidneys in maintaining  $K^+$  balance. [4]

**Question Number : 6 Question Id : 32718726278 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

Explain the physio-clinical significance of:

a) Timed vital capacity. [4]

b) Law of Laplace. [3]

c) Ventilation perfusion ratio. [3]

**Question Number : 7 Question Id : 32718726279 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) Recommended dietary allowances. [3]

b) Respiratory quotient and its significance. [3]

c) Childhood overnutrition and its implications. [2]

d) Tissue protein stores in starvation. [2]

**Question Number : 8 Question Id : 32718726280 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 structure of platelets. Explain the role of platelets in hemostasis. Add a note on immature platelet fraction. [3+5+2]

**Question Number : 9 Question Id : 32718726281 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) Physiological responses to gravitational force. [5]

b) Exercise tolerance and fatigue. [5]

**Question Number : 10 Question Id : 32718726282 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) Describe the physiologic anatomy of the urinary bladder. [2]

b) Explain the micturition reflex and its control by higher centers of the brain. [5]

c) Differentiate between atonic bladder and automatic bladder. [3]