

# National Board of Examinations

<b>Question Paper Name :</b>	DNB Physiology Paper1
<b>Subject Name :</b>	DNB Physiology Paper1
<b>Creation Date :</b>	2024-10-17 16:12:18
<b>Duration :</b>	180
<b>Total Marks :</b>	100
<b>Display Marks:</b>	No
<b>Share Answer Key With Delivery Engine :</b>	No
<b>Actual Answer Key :</b>	No

## DNB Physiology Paper1

<b>Group Number :</b>	1
<b>Group Id :</b>	3271872881
<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>Break time :</b>	0
<b>Group Marks :</b>	100

## DNB Physiology Paper1

<b>Section Id :</b>	3271872884
<b>Section Number :</b>	1
<b>Section type :</b>	Offline
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	10
<b>Number of Questions to be attempted :</b>	10
<b>Section Marks :</b>	100
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	3271872888
<b>Question Shuffling Allowed :</b>	No

**Question Number : 1 Question Id : 32718730094 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) Compare and contrast constitutive and non-constitutive pathways of secretion. [7]
- b) Add a note on porosomes. [3]

**Question Number : 2 Question Id : 32718730095 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Establishing and maintaining cell polarity. [6]
- b) Role of cell polarity in cellular function and development. [4]

**Question Number : 3 Question Id : 32718730096 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Describe in detail G proteins and their role in signal transduction. [7]
- b) G protein receptor disorders. [3]

**Question Number : 4 Question Id : 32718730097 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Explain the basis for the resting membrane potential of a neuron. [5]
- b) Describe the effect of hyperkalemia and hypokalemia on resting membrane potential. [5]

**Question Number : 5 Question Id : 32718730098 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Describe the formation of antibodies and sensitized lymphocytes by a lymph node in response to antigens. [10]

**Question Number : 6 Question Id : 32718730099 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Discuss the following statement with examples, "Essential fatty acids are necessary for the health of an individual". Add a note on the role of cholesterol in the etiology and course of atherosclerosis. [6+4]

**Question Number : 7 Question Id : 32718730100 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Describe primary active and secondary active transport processes with example. Describe the mechanism of transport of water across epithelium. [4+6]

**Question Number : 8 Question Id : 32718730101 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

- a) Competency Based Medical Education for MBBS students. [5]
- b) Importance of District Residency Program for Medical Post Graduate students. [5]

**Question Number : 9 Question Id : 32718730102 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Enumerate and discuss the methods used to record/measure:

- a) Cell adhesion molecules. [5]
- b) Post translation modification. [5]

**Question Number : 10 Question Id : 32718730103 Question Type : SUBJECTIVE Consider As Subjective : Yes**

**Correct Marks : 10**

Discuss the maintenance of a nearly constant internal environment and its clinical relevance. [10]