

# National Board of Examinations

<b>Question Paper Name :</b>	DNB Physiology Paper3
<b>Subject Name :</b>	DNB Physiology Paper3
<b>Creation Date :</b>	2024-05-17 19:22:14
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## DNB Physiology Paper3

<b>Group Number :</b>	1
<b>Group Id :</b>	3271872030
<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 Paper3

<b>Section Id :</b>	3271872033
<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>	3271872037
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

**Question Number : 1 Question Id : 32718719942 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. With the help of well-labelled diagram(s) describe neuromuscular junction and sequence of events during transmission of impulses across it in a skeletal muscle. Differentiate between Myasthenia Gravis and Lambert-Eaton syndrome. Add a note on drugs that block transmission at the neuromuscular junction. [4+3+3]

**Question Number : 2 Question Id : 32718719943 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) Stretch reflex and Withdrawal reflex. [4]
- b) "Set-Point" for temperature control. [2]
- c) Fetoplacental unit. [2]
- d) Tympanic reflex. [2]

**Question Number : 3 Question Id : 32718719944 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 neuro-humoral mechanisms in regulation of appetite. [10]

**Question Number : 4 Question Id : 32718719945 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:

- a) Somatic and visceral pain. [5]
- b) Explicit and implicit memory. [5]

**Question Number : 5 Question Id : 32718719946 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 mechanism of action of hormones that act mainly on genetic machinery of the cell. [6]
- b) Write short notes on measurement of hormone concentrations in the blood by radioimmunoassay and Enzyme-Linked Immunosorbent Assay. [4]

**Question Number : 6 Question Id : 32718719947 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 10**

Define the term "Evoked Potentials" (EP) and enumerate different types of EPs. Describe the physiological basis of Evoked Potentials and their clinical use. [2+2+3+3]

**Question Number : 7 Question Id : 32718719948 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 serial and parallel processing of visual image from the retina to the brain. Explain what will happen and why if visual images chronically fall on noncorresponding points in the two retinas in young children. [7+3]

**Question Number : 8 Question Id : 32718719949 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 functions and regulation of adrenal medullary hormones. [5+5]

**Question Number : 9 Question Id : 32718719950 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 process of spermatogenesis and its regulation. [5+5]

**Question Number : 10 Question Id : 32718719951 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) Aphasia. [4]
- b) Endolymphatic potential and cochlear microphonics. [3]
- c) Signal transduction in Taste receptors. [3]