

National Board of Examinations

Question Paper Name :	DNB Physiology Paper3
Subject Name :	DNB Physiology Paper3
Creation Date :	2023-10-15 15:59:01
Duration :	180
Share Answer Key With Delivery Engine :	No
Actual Answer Key :	No

DNB Physiology Paper3

Group Number :	1
Group Id :	3271872580
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Group Marks :	100
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

DNB Physiology Paper3

Section Id :	3271872583
Section Number :	1
Section type :	Offline

Mandatory or Optional :	Mandatory
Number of Questions to be attempted :	10
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	3271872587
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 32718726283 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 synthesis, mechanism of action and regulation of glucocorticoid secretion. [3+3+4]

Question Number : 2 Question Id : 32718726284 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) Direct and indirect actions of growth hormone. [5]
- b) Bone formation and resorption. [5]

Question Number : 3 Question Id : 32718726285 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) Central and peripheral retina. [3]
- b) Presynaptic inhibition and facilitation. [3]
- c) Conditioned and unconditioned reflexes. [2]
- d) Unitary and multiunit smooth muscle. [2]

Question Number : 4 Question Id : 32718726286 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 somatotopic organization of ascending sensory pathways. [4]
- b) Describe how the descending pathways act to regulate the flow of activity in ascending somatosensory pathways. [4]
- c) Explain the physiological basis of symptoms seen in Brown-Sequard syndrome. [2]

Question Number : 5 Question Id : 32718726287 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) Alpha-gamma coactivation. [5]
- b) Hypothalamic-pituitary axis. [5]

Question Number : 6 Question Id : 32718726288 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) Pupillary reflexes and their physio-clinical significance. [5]
- b) Otoacoustic emissions and their physio-clinical significance. [5]

Question Number : 7 Question Id : 32718726289 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) Endocrinal and immunological functions of placenta. [5]
- b) Hormonal changes and their physiologic effects during menopause. [5]

Question Number : 8 Question Id : 32718726290 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 electrical and contractile properties of skeletal muscle. Add a note on muscular dystrophies. [3+4+3]

Question Number : 9 Question Id : 32718726291 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 micro-circuitry of cerebellar cortex. Explain the role of cerebellum in motor control. Add a note on clinical abnormalities of cerebellum. [3+4+3]

Question Number : 10 Question Id : 32718726292 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 bio-physical principles underlying loss of heat from the skin surface. Explain the physiological mechanism of shivering and non-shivering thermogenesis. Add a note on artificial hypothermia. [4+4+2]