National Board of Examinations

Question Paper Name :	DNB Physiology Paper3
Subject Name :	DNB Physiology Paper3
Creation Date :	2022-12-26 13:13:39
Duration :	180
Share Answer Key With Delivery Engine :	No
Actual Answer Key :	No

DNB Physiology Paper3

Group Number :	1
Group Id :	3271871345
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 :	3271871348
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 :	3271871352
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 32718712502 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 phototransduction. Explain the role of Ca^{2+} in light adaptation. [5+5]

Question Number : 2 Question Id : 32718712503 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 of basal ganglia. Explain the pathophysiological basis of movement disorders seen in Parkinson disease. Add a note on medical treatment of Parkinson disease. [3+4+3]

Question Number : 3 Question Id : 32718712504 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) Biological rhythms in humans. [6]

b) Physiological basis of Jet lag. [4]

Question Number : 4 Question Id : 32718712505 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 the length-tension relationship in skeletal and smooth muscle. Explain why skeletal muscle can be tetanized and cardiac muscle cannot be tetanized? [7+3]

Question Number : 5 Question Id : 32718712506 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 role of limbic system in regulation of rage and fear. Explain what will happen and why if there is bilateral ablation of amygdala? [6+4]

Question Number : 6 Question Id : 32718712507 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 synthesis, mechanism of action and regulation of insulin secretion. [2+3+5]

Question Number : 7 Question Id : 32718712508 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 changes in plasma hormone concentrations that occur during puberty in boys and girls. Explain the difference between true precocious puberty and precocious pseudo puberty. [7+3]

Question Number : 8 Question Id : 32718712509 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 role of activins and inhibins in control of testicular function. Explain what will happen and why if there is undescended testes? [4+3+3]

Question Number : 9 Question Id : 32718712510 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 physiology of lactation. Add a note on Chiari-Frommel Syndrome. [7+3]

Question Number : 10 Question Id : 32718712511 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 and functions of muscle spindles. Explain the physiologic basis of clonus. [(3+4)+3]