

National Board of Examinations

Question Paper Name :	DNB Physiology Paper1
Subject Name :	DNB Physiology Paper1
Creation Date :	2022-12-22 22:33:48
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Share Answer Key With Delivery Engine :	No
Actual Answer Key :	No

DNB Physiology Paper1

Group Number :	1
Group Id :	3271871343
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 Paper1

Section Id :	3271871346
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 :	3271871350
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 32718712482 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. Distinguish between the body's internal environment and external environment. Describe the components of a feedback system. What is the significance of feedforward control? [2+6+2]

Question Number : 2 Question Id : 32718712483 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 fluid mosaic model of the plasma membrane. Explain how the proteins present in a plasma membrane determine the functions that a membrane can perform. [4+6]

Question Number : 3 Question Id : 32718712484 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 why the nucleus is referred to as the control center of the cell. What is human genome project and why was it undertaken? [6+(1+3)]

Question Number : 4 Question Id : 32718712485 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 mitogenic signaling pathway in regulating cell growth, proliferation and survival. [10]

Question Number : 5 Question Id : 32718712486 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

Write briefly on the history of development of Electrocardiograph and stethoscope. [7+3]

Question Number : 6 Question Id : 32718712487 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) Donnan effect. [5]

b) Tonicity. [5]

Question Number : 7 Question Id : 32718712488 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) Primary and Secondary active transport. [4]
- b) Gap junctions and Tight junctions. [3]
- c) Apoptosis and Necrosis. [3]

Question Number : 8 Question Id : 32718712489 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 molecular basis of antigen recognition and antigen presentation in humans. Add a note on the physiological basis of immunization. [(3+4)+3]

Question Number : 9 Question Id : 32718712490 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) Doctor-patient relationship. [5]
- b) Ethics in biomedical research. [5]

Question Number : 10 Question Id : 32718712491 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) Strength duration curve. [5]
- b) Compound action potential. [5]