

National Board of Examinations

Question Paper Name :	DNB Biochemistry Paper1
Subject Name :	DNB Biochemistry Paper1
Creation Date :	2024-10-17 16:12:26
Duration :	180
Total Marks :	100
Display Marks:	No
Share Answer Key With Delivery Engine :	No
Actual Answer Key :	No

DNB Biochemistry Paper1

Group Number :	1
Group Id :	3271872704
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100

DNB Biochemistry Paper1

Section Id :	3271872707
Section Number :	1
Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	100
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	3271872711
Question Shuffling Allowed :	No

Question Number : 1 Question Id : 32718734074 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. Define Clearance. What are acute kidney injury (AKI) biomarkers? Write a note on Cystatine C as a chronic kidney injury marker. [2+4+4]

Question Number : 2 Question Id : 32718734075 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

What are triple helix? Describe biosynthesis of collagen in various organelles and its types. Discuss about the diseases caused due to the altered collagens. [1+5+4]

Question Number : 3 Question Id : 32718734076 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Explain the mechanism of competitive inhibition and non-competitive inhibition with Lineweaver-Burk plot as an example. What are the applications of Dixon plots? [7+3]

Question Number : 4 Question Id : 32718734077 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

- a) Accuracy and Precision in clinical laboratory. [5]
- b) Levy-Jening chart and Westgard's rule in quality control. [5]

Question Number : 5 Question Id : 32718734078 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Describe the various metabolic functions of bone in our body and explain significance of blood and urine finding in osteoporosis and osteomalacia. [10]

Question Number : 6 Question Id : 32718734079 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Define proteosome. How proteins are degraded in proteosome? Comment on conformational changes that occur in various diseases caused by abnormalities of intracellular transport of protein. [1+4+5]

Question Number : 7 Question Id : 32718734080 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Define Glycoproteins. Classify it and discuss the importance of Glycoproteins in our body. What are the abnormalities in the synthesis of Glycoproteins? [1+6+3]

Question Number : 8 Question Id : 32718734081 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

What is Glutathione? How it is synthesized? What is the function of glutathione in various metabolic activities in human body? [1+4+5]

Question Number : 9 Question Id : 32718734082 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

Define Quality assurance cycle. What are the different types of quality control errors related with laboratory and its corrections? [2+8]

Question Number : 10 Question Id : 32718734083 Question Type : SUBJECTIVE Consider As Subjective : Yes

Correct Marks : 10

a) Sample size calculation in research methodology. [5]

b) Qualitative and Quantitative index markers of a good research paper. [5]