

National Board of Examinations

Question Paper Name : DNB Biochemistry Paper1
Subject Name : DNB Biochemistry Paper1
Duration : 182
Total Marks : 100
Display Marks: No

Maximum Instruction Time : 0
Is Section Default? : No

Question Number : 1 Question Id : 32718743986 Consider As Subjective : Yes

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 proteinuria. Explain the pathogenesis, biochemical findings and management protocol in different types of proteinuria. [2+8]

Question Number : 2 Question Id : 32718743987 Consider As Subjective : Yes

Explain proficiency testing (PT) in quality improvement in a clinical biochemistry laboratory. Add a note on delta checks. [6+4]

Question Number : 3 Question Id : 32718743988 Consider As Subjective : Yes

Enumerate the various mechanisms of enzyme regulation in the body. Explain in detail the underlying mechanism and kinetics of any one of them with suitable examples. [3+7]

Question Number : 4 Question Id : 32718743989 Consider As Subjective : Yes

Compare and contrast:

- a) Case control and cohort study. [5]
- b) Random error and systematic error. [5]

Question Number : 5 Question Id : 32718743990 Consider As Subjective : Yes

Explain in detail the process of protein isolation and characterization from crude extract. [10]

Question Number : 6 Question Id : 32718743991 Consider As Subjective : Yes

Explain the clinical significance of estimation of:

- a) Carbohydrate deficient transferrin. [2.5]
- b) Fructosamine. [2.5]
- c) Serum bile acids. [2.5]
- d) Antimullerian hormone. [2.5]

Question Number : 7 Question Id : 32718743992 Consider As Subjective : Yes

Explain the process of establishment of reference interval of any analyte. [10]

Question Number : 8 Question Id : 32718743993 Consider As Subjective : Yes

- a) ANOVA. [2.5]
- b) Random sampling. [2.5]
- c) PICOT in research. [2.5]
- d) Type 1 error. [2.5]

Question Number : 9 Question Id : 32718743994 Consider As Subjective : Yes

Derive the Michaelis-Menten equation and explain its utility in defining enzyme kinetics. [4+6]

Question Number : 10 Question Id : 32718743995 Consider As Subjective : Yes

Highlight the impact of improper specimen collection on test accuracy and patient outcomes. [10]