

**BSc (NEP) Semester-2 Examination****DSC-C-121 T****Biochemistry****Time : 2-00 Hours]****April-2024****[Max. Marks : 50**

- Q1a) Discuss the functions of plasma membrane. (10)  
OR
- Q1a) Describe the Structure & Functions of Nucleus. (10)
- Q2a) Draw, label & list Watson Crick DNA postulates. (07)  
b) Define Gene, Telomere & Chromatin. (03)  
OR
- Q2a) Draw the structure of any three derivatives of nucleotides & give one function of each. OR (06)  
b) Define Replication, Transcription, Translation & Reverse Transcription. (04)
- Q3a) Describe fibrous & globular proteins, give their differences. (05)  
b) Write a note on alpha helical structure of proteins. (05)  
OR
- Q3a) List the steps involved in sequencing of proteins & discuss sequencing by Edmans degradation step. OR (10)
- Q4a) Draw the structure of cellulose & discuss the uses. (05)  
b) Explain Step down reaction of sugars. (05)  
OR
- Q4a) Discuss the importance of Phospholipids. OR (10)
- Q5 Attempt any 10 (10)
1. Name the power house of the cell. Why is it called so?
  2. Give one difference between cell wall & cell membrane.
  3. According to the broad classification of humans diseases, name the two classes of diseases.
  4. Give the main function of tRNA.
  5. What are Nucleosomes?
  6. Where are rRNAs found? Give the full form of siRNA.
  7. Which salt is most commonly used for precipitation of proteins & why?
  8. Define conjugated Proteins & give one example.
  9. Write any one function of Lipoproteins.
  10. What is the parent compound of Phosphoglycerides? Write its structure.
  11. Define invert sugar.
  12. Give one role of Prostaglandin.

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