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1705E384

Candidate's Seat No :_____

B.Sc. Sem.-2 (Rep.) Examination

CC 3-P-103

Biochemistry

May-2024

Time : 2-30 Hours] **[Max. Marks : 70**

Instructions: Attempt ALL questions
All questions carry equal marks.
Question 5 is compulsory
Draw diagrams wherever necessary

Q1. (A) Draw the structure and mention the sources of: 1. Glycogen2. Pectin 3. Raffinose 4. Lactose **(08)**

(B) Draw the structure of Starch and discuss its location &uses. **(06)**

OR

Q1. (A) Draw the structure and mention the sources of: 1. Cellulose 2. Sucrose 3. Chondroitin sulphate 4. Maltose. **(08)**

(B) Write a note on bacterial cell wall. **(06)**

Q2. (A) Discuss the functions of proteins. **(10)**

(B) Name the four levels in protein structure. Give one example each ofalpha helical& beta pleated sheet structure of proteins. **(04)**

OR

Q2: (A) Discuss Conjugate proteins with examples. **(09)**

(B) List the steps involved in protein sequencing **(05)**

Q3. (A) Discuss the functions of phospholipids **(09)**

(B) Discuss the action of Phospholipases on Lecithin. **(05)**

OR

Q3. (A) Write a note on Cholesterol. **(10)**

(B) Write a brief note on Prostaglandins. **(04)**

Q4. (A) Draw the structure of any three derivatives of nucleotides ang give its function **(09)**

(B) Draw the structures of: 1. Cytidine 2. Guanine 3. Any rare base **(05)**

OR

Q4. (A) Draw, label and list the Watson and Crick postulates of DNA. **(09)**

(B) What are the differences between nucleoside and nucleotide. What are two important properties of nitrogen bases. **(05)**

Q5. **Attempt any SEVEN Questions** **(14)**

1. What is inversion? Explain with example.
2. State any two functions of homopolysaccharides.
3. Write ant two important uses of Cellulose.
4. Define: Isoelectric pH
5. What are lipoproteins. Give one example.
6. Give two differences between fibrous and globular proteins.
7. What are gangliosides? Give its one role.
8. Write any two physical properties of phospholipids?
9. Name anytwo-color reactions of cholesterol.
10. What is the structure of t-RNA. Give its function
11. What is the location and r- RNA. Give the function of m-RNA
12. List two important differences between DNA and RNA

—X—