

B.Sc. Sem.-1 Examination**CC-1-P-101****Biotechnology****October-2024****Time : 2-30 Hours]****[Max. Marks : 70**

Answer the following

1. Discuss structure and functions of different RNA. 14

OR

1(A). Write about major divisions of Biotechnology. 7

1(B). Explain structure of B-DNA. 7

2. Explain classification of amino acids based on "R" group. 14

OR

2(A). Explain secondary structure of protein. 7

2(B). Write about biological functions of proteins. 7

3. Describe structure and functions of monosaccharides. 14

OR

3(A). Write about reducing and non-reducing properties of carbohydrates with examples. 7

3(B). Explain structure and functions of starch. 7

4. Discuss classification of lipids with examples. 14

OR

4(A). Explain about phospholipids? 7

4(B). Describe about saturated and unsaturated fatty acids with examples. 7

5. Answer any seven of the following: 14

1. Define mutarotation.

2. What is aldose and ketose?

3. Write structure of sucrose.

4. What is the function of cellulose?

5. What is cholesterol?

6. Name two glycolipids.

7. What is saponification?

8. Write two biological functions of lipids.

9. What is zwitterion?

10. What is scope of biotechnology?

11. Write about quaternary structure with an example.

12. Write difference between nucleotide and nucleoside.