

**2023**  
**B.A./B.Sc.**  
**Third Semester**  
CORE – 7  
**ZOOLOGY**  
*Course Code: ZOC 3.31*  
(Fundamentals of Biochemistry)

*Total Mark: 70*  
*Time: 3 hours*

*Pass Mark: 28*

*Answer five questions, taking one from each unit.*

**UNIT-I**

1. Give an account on the structure and classification of disaccharides. 7+7=14
2. Describe the structure and properties of glycoconjugates. 7+7=14

**UNIT-II**

3. Enumerate the classification of lipids and mention their biological importance. 7+7=14
4. Give an account on tri-acylglycerols and steroids. 7+7=14

**UNIT-III**

5. Describe the various properties of amino acids. Add a note on the non-essential amino acids. 10+4=14
6. Explain the various types of bonds stabilizing protein structure. 14

**UNIT-IV**

7. Discuss the various types of DNA giving appropriate diagram and explain hyperchromaticity of DNA. 7+7=14
8. Explain  $C_{\infty}t$  curves. Discuss on the significance of  $C_{\infty}t$  curve. 6+8=14

## UNIT-V

9. Classify enzymes with examples. Add a note on the specificity of enzymes. 9+5=14
10. Describe the factors inhibiting enzyme action and how enzyme actions are regulated. 9+5= 14
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