

**2022**  
**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 monosaccharides. 7+7=14
2. Describe the biological importance of disaccharides and polysaccharides. 7+7=14

**UNIT-II**

3. Describe the salient features of fatty acids. Differentiate between saturated and unsaturated fatty acids. 7+7=14
4. Give an account on phospholipids and glycolipids. 7+7=14

**UNIT-III**

5. What is protein? Describe the levels of organization in protein molecule. 2+12=14
6. Explain how amino acids are classified based on its chemical nature. 14

**UNIT-IV**

7. Discuss on the agents that affects the denaturation and renaturation of DNA. 7+7=14

8. Explain the structure of purines with the help of neat diagram. Describe the Chargaff's rule of base pairing. 6+8=14

### UNIT-V

9. Describe enzyme. Describe the theories of enzyme action. 2+12=14
10. Write an account on allosteric enzymes and their kinetics. 14
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