

(2) **Bs/ZOO/C7(T)**

2025

(FYUGP)

(4th Semester)

ZOOLOGY

(MAJOR)

Paper : ZOO/C7(T)

(Fundamental of Biochemistry)

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

**The figures in the margin indicate full marks
for the questions**

- 1. Explain in detail the structures of monosaccharide and disaccharide with suitable examples. 7½+7½=15**

Or

Give a detailed account of gluconeogenesis with appropriate diagram. 15

2. Explain the structure and biological significance of phospholipids. 15

(Or)

Explain the structure and biological significance of glycolipids.

3. Describe the structure of α -amino acid. Write an account on the classification of α -amino acid. 6+9=15

(Or)

Explain the primary, secondary, tertiary and quaternary structures of proteins. 15

4. What are nucleic acids? Describe in detail the structure of nucleotides. 2+13=15

Or

Explain the hypo- and hyper-chromaticity of DNA. Add a note on the types of RNA. 10+5=15

5. Give a detailed account on the nomenclature and classification of enzymes. 15

Or

Discuss the Lineweaver-Burk plot with proper graphical representations. What are the factors affecting the rate of an enzyme-catalysed reaction? 8+7=15

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