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(FYUGP)

(4th Semester)

ZOOLOGY

(Major)

Paper Code : ZOO/C7

(Fundamental of Biochemistry)

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

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

1. What are carbohydrates? Explain the structure and classification of carbohydrates.

1+5+9=15

Or

What is glycolysis? Explain glycolysis in detail with appropriate illustration. 2+13=15

2. What are lipids? Write an essay on the classification of lipid. 2+13=15

(EXCISE)
Or

Write on the structure, properties and biological significance of tri-acylglycerols. 15

3. Explain in detail the level of organization in proteins with proper diagrams. 15

Or

Write an essay on the physiological importance of essential and non-essential α -amino acids. Add a note on bonds stabilizing protein structure. 12+3=15

4. Explain the structure of DNA. Add a note on the types of DNA. 10+5=15

Or

Write an essay on the complementarity of DNA. Add a note on denaturation of DNA. 10+5=15

5. What are enzymes? With proper diagrams, explain the mechanism of enzyme action. 1+14=15

Or

Derive the Michaelis-Menten equation. 15
