

(FOR THE CANDIDATES ADMITTED

22UZY510

DURING THE ACADEMIC YEAR 2022 ONLY)

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : NOVEMBER 2024

B.Sc ZOOLOGY

MAXIMUM MARKS: 50

SEMESTER-V

TIME : 3 HOURS

PART – III

22UZY510–BIOCHEMISTRY

SECTION – A (10 X 1 = 10 MARK

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. Choose the bond which is common in organic compounds\_\_\_\_\_.  
a.covalent bond      b.ionic bond      c.hydrogen bond      d.electrovalent bond
2. Match the amount of energy is yielded by one gram of lipid\_\_\_\_\_  
a. 6.3Kcal      b. 4.3Kcal      c.9.3Kcal      d. 3.3Kcal
3. Relate Histone with the following\_\_\_\_\_  
a. conjugated proteins      b. simple proteins      c.fibrous protein      d. globular protein
4. What is the process of synthesis of glycogen from glucose?  
a. Glycogenesis      b. glycolysis      c. glycogenolysis      d. Glyconeogenesis
5. Which one of the following is the deficiency of vitamin D in adults?  
a.rickets      b. osteomalacia      c. scurvy      d. beri beri

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. Define atoms.
7. Explain triglycerides.
8. What are Globular proteins.
9. Why is Deamination process important.
10. Differentiate ligases and lyases.

SECTION – B

(5 X 3 = 15 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K3)

11. a). Compare homopolysaccharide and heteropolysaccharide.

(OR)

- b) Interpret an electrovalent bond.

- 12.a).Assess the functions of derived lipids.

(OR)

- b).Interpret the lipids associated with Obesity disorders.

(CONT...2)

13. a. List the biological functions of protein.

(OR)

b) Demonstrate the synthesis of Phenyl alanine.

14. a) Describe the process of Glycogenolysis.

(OR)

b).Sketch the Krebs cycle.

15. a) List the salient features of Co-enzymes.

(OR)

b) Deduce the sources of vitamin C reference to its deficiency symptom.

**SECTION – C**

**(5 X 5 = 25 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.(K4 (Or) K5)**

16. a).Elucidate the properties of Monosaccharides.( **K4**)

(OR)

b).Determine the properties and biological significance of Water. (**K4**)

17. a).Formulate the structure and functions of Phospholipid. (**K5**)

(OR)

b) Point out the biological functions of lipids. (**K5**)

18. a) Categorize the fibrous proteins. (**K4**)

(OR)

b).Interpret the various functions of Proteins. (**K4**)

19. a) Discuss the Beta oxidation of fatty acids. (**K4**)

(OR)

b) .List the steps involved in glycolysis. (**K4**)

20. a).Compare and Contrast the different types of Enzyme inhibition. (**K5**)

(OR)

b).Summarize the sources and deficiencies of fat soluble Vitamins. (**K5**)

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**ETHICAL PAPER**