PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b)

Each answer should not exceed 600 words.

16. (a) Describe about atoms and molecules.

Or

(b) Define biological importance of buffer.

17. (a) Illustrate about metabolism and relate with glycolysis.

Or

(b) Explain biomedical significance of Diabetis mellitus.

18. (a) Explain about Ramachandran plot.

Or

(b) Determine classification of enzymes.

19. (a) Evaluate about ketosis.

Or

(b) Write about role of liver in fat metabolism.

20. (a) Illustrate about sources and deficiency diseases of water soluble vitamins.

Or

(b) Distinguish about nucleic acid metabolism with anyone of the associated syndrome.

———————

Code No. : 7446        Sub. Code : ZZOM 14

M.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2023.

First Semester

Zoology – Core

BIOCHEMISTRY

(For those who joined in July 2021-2022)

Time : Three hours        Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. In water the hydrogen and oxygen atoms held together by

   (a) Covalent bonds       (b) Stable atoms

   (c) Unstable bonds       (d) Week bonds

2. Certain compounds dissociate into ions when electric current is passed is called

   (a) Isotopes             (b) Electrolysis

   (c) Anions               (d) Cations

3. Biodegration phase of metabolism is

   (a) Anabolism      (b) Metabolism

   (c) Catabolism      (d) Hydration

4. Excretion of galactose in urine is called

   (a) Lactosuria      (b) Fructosuria

   (c) Glucosuria      (d) Galactosuria

5. The living cell madeup of ——————% of protoplasm.

   (a) 12      (b) 5

   (c) 25      (d) 40

6. Inborn error of metabolism of protein leads to mental retardation is called

   (a) Tyrosinosis      (b) Alkaptonuria

   (c) Albinism      (d) Phenylketonuria

7. Hyperlipoproteinemia is —————— disease

   (a) Deficiency      (b) Metabolic disorder

   (c) Heredity      (d) Inborn error

8. During arthrosclerosis the macrophages become over loaded with cholesterol and ester is called

   (a) Necrosis      (b) Netosis

   (c) Foam cells      (d) Ketosis

9. Vitamin A deficiency cause

   (a) Scurvy      (b) Rickets

   (c) Beri beri      (d) Night blindness

10. Diseases caused due to errors in nucleic acid metabolism

    (a) Lesch-Nyhan Syndrome

    (b) Bery bery

    (c) Scurvy

    (d) Anemia

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) State the biological importance of water.

    Or

    (b) Define-pH.

12. (a) Explain about properties of carbohydrate.

    Or

    (b) Discuss on glycogenolysis.

13. (a) Illustrate about functions of amino acids.

    Or

    (b) Explain about Isoenzymes.

14. (a) Summarize about ketosis.

    Or

    (b) Write about arthrosclerosis.

15. (a) Evaluate about nucleic acid.

    Or

    (b) Summarize about gout.