C. ABDUL HAKEEM COLLEGE (AUTONOMOUS), MELVISHARAM - 632 509. SEMESTER EXAMINATIONS, APRIL - 2018

B.Sc., ZOOLOGY

SEMESTER VI

U14EZL601 - BIOCHEMISTRY (ELECTIVE - II)

Time: Three Hours

Maximum: 75 Marks

SECTION - A $(10 \times 2 = 20 \text{ Marks})$

Answer ALL Questions.

Define/Explain the following:

- 1. Hydrogen ion concentration.
- 2. Acid.
- 3. Energy.
- 4. Oxidation.
- 5. Disaccharides.
- 6. Night blindness.
- 7. Enzymes.
- 8. Km constant.
- 9. Subcellular Fractionation.
- 10. Centrifugal force.

SECTION - B (5 X 5 = 25 Marks)

Answer ALL Questions.

11. a) List out the properties of water.

(Or)

b) Comment on the role of Buffers.

12. a) Write an account on Enthalpy.

(Or)

- b) Explain redox reaction.
- 13. a) Give a brief note on primary structure of proteins.

(Or)

- b) Comment on the deficiency symptoms of Vitamin D.
- 14. a) List out the physico-chemical properties of enzymes.

(Or)

- b) Briefly explain the factors affecting the enzyme activity.
- 15. a) Explain the principle of electrophoresis.

(Or)

b) Give an account on the biochemistry of antibiotics.

SECTION - C (3 \times 10 = 30 Marks)

Answer ANY THREE Questions.

- 16. Explain the functions of electrolytes.
- 17. Explain briefly the free energy concept.
- 18. Write an account on water soluble vitamins.
- 19. Classify enzymes with examples.
- 20. Explain the separation of biological materials by any one of the methods of chromatography.
