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

B.Sc., ZOOLOGY

SEMESTER VI

U15EZL601 - BIOCHEMISTRY (ELECTIVE - II)

Time: Three Hours

Maximum: 75 Marks

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

Answer ALL Questions.

Explain/Define the Following:

- 1. Chemical bond.
- 2. Buffer solution.
- 3. Enzyme activation.
- 4. Haemoglobin.
- 5. Polysaccharides.
- 6. Cellulose.
- 7. Peptide Bonds.
- 8. Purines.
- 9. Cholesterol.
- 10. Lecithin.

SECTION - B (5 X 5 = 25 Marks)

Answer ALL Questions.

11. a) Explain the structure of an atom.

(Or)

b) Explain the hydrogen ion concentration in a solution.

12. a) Discuss the properties of enzymes.

(Or)

- b) Explain the mechanism of Co-enzyme action.
- 13. a) Discuss the classification of oligosaccharides.

(Or)

- b) Briefly explain the structure of glucose.
- 14. a) Describe the derived proteins.

(Or)

- b) Write a brief note on the inborn errors on amino acid metabolism.
- 15. a) Write a short note on salient features of fatty acids.

(Or)

b) Describe the classification of lipids.

SECTION - C (3 X 10 = 30 Marks)

Answer ANY THREE Questions.

- 16. Describe the structure and properties of water.
- 17. Write an essay on the enzyme.
- 18. Explain the structure and functions of carbohydrates.
- 19. Explain the structure and functions of purines and pyrimidines.
- 20. Write an essay on the lipid metabolism.
