

D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1**SEMESTER EXAMINATIONS****NOVEMBER – 2017****15CZO5D****ELECTIVE I: BIOCHEMISTRY****Time : 3 Hrs****Max. Marks : 75****SECTION-A (10 x 2 = 20)****Answer ALL the questions.**

1. Define Acidosis and Alkalosis.
2. Explain dipole Nature of water.
3. Explain Redox couple.
4. Define Entropy and Enthalpy.
5. What are Homo and heteropolysaccharides?
6. Write a short note on fatty acids.
7. Write any two physical properties of enzymes.
8. Classify the enzyme based on the chemical reaction.
9. Define antigen and antibody.
10. Define chromatography.

SECTION-B (5 x 5 = 25)**Answer any FIVE of the following questions.**

11. Explain the buffer system to maintain pH in the blood.
12. Write short notes on ATP Bioenergetics.
13. Explain about the Biological functions of proteins.
14. Explain the mechanism of enzyme action.
15. Write about the principles and types of electrophoresis.
16. Describe the structure of monosaccharides.
17. Explain the mode of action of antigen and antibodies.
18. Give an account on the Disaccharides.

SECTION-C (3 x 10 = 30)**Answer ALL the questions.**

19. (a) Enumerate the properties of water.
(Or)
(b) Explain the laws of Thermodynamics.
20. (a) Write about the fat – soluble vitamins.
(Or)
(b) Discuss about the compound lipids.
21. (a) Explain the factors affecting enzyme action.
(Or)
(b) Explain the principle and application of paper Chromatography.