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D.K.M.COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1

SEMESTER EXAMINATIONS

NOVEMBER - 2017

16CPZO3D

ELECTIVE III: BIOPHYSICS AND BIOCHEMISTRY

Time: 3 Hrs

Max.Marks : 75

SECTION-A (5x 6 =30)

Answer ALL the questions.

1. (a) Write an account on Hydrogen bonds and Vanderwaal's forces.
(Or)
(b) Explain about the covalent bond and peptide bond.
2. (a) Briefly explain Gibbs donnan equilibrium.
(Or)
(b) Explain oxidation and reduction in terms of electron transfer.
3. (a) Discuss about the principles involved in the photoelectric colorimetry.
(Or)
(b) Explain about Autoradiography.
4. (a) Describe the structure and classification of carbohydrates.
(Or)
(b) Write the structure and metabolism of proteins.
5. (a) Discuss briefly the structure and classification of lipid soluble vitamins.
(Or)
(b) Give an account on minerals.

SECTION-B (3x15 =45)

Answer any THREE of the following questions.

6. Explain about the quantum numbers.
7. Explain the second law of thermodynamics using concept of Entrophy.
8. What is spectroscopy? Explain the principles of UV – IR Spectroscopy in biological investigations.
9. Give an account on the biosynthesis and oxidation of fatty acids.
10. Describe the structure and classification of water soluble Vitamins.

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