

D. K. M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1**SEMESTER EXAMINATIONS****NOVEMBER - 2017****15CZO3A****CELL AND MOLECULAR BIOLOGY****Time : 3 Hours****Max. Marks : 75****SECTION – A (10 x 2 = 20)****Answer ALL the questions.****Define / Explain the following.**

1. Homogenization.
2. Expand TEM and SEM.
3. Centriole.
4. Endocytosis.
5. Nuclear pore.
6. Cytokinesis.
7. Autocrine signalling.
8. Effector cell.
9. mRNA.
10. Codon.

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

11. Explain about the paper chromatography.
12. Describe the fluid mosaic model of plasma membrane.
13. Discuss the functions of Golgi apparatus.
14. Write the significance of mitotic cell division.
15. Give an account of the ultra structure of chromosome.
16. Write a short account on the surface receptors and intracellular receptors.
17. Explain the semi conservative model of DNA replication.
18. Write short notes on protein synthesis.

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

19. (a) Describe the principle and the structure of electron microscope.

(Or)

- (b) Write about the electrophoresis. Add a note on its applications.

20. (a) Explain about the polymorphism in lysosomes.

(Or)

- (b) Describe the ultra structure of nucleus.

21. (a) Explain cell signalling through the second messenger system.

(Or)

- (b) Describe the types of RNA.