

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

FIFTH SEMESTER – APRIL 2016

AZ 5516 – CELL AND MOLECULAR BIOLOGY

Date: 26-04-2016

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

SECTION – A

Answer **ALL** the questions:

(10x2=20 marks)

1. Mitosis
2. Cell therapy
3. Autoradiography
4. Dark field microscope
5. Biogenesis
6. Peroxisomes
7. Metastasis
8. Cell signaling
9. Tumor suppressor gene
10. Apoptosis

SECTION – B

Answer any **FOUR** of the following:

(4x10=40 marks)

11. Elaborate cell cycle with illustrations.
12. Write any two cytological techniques used in Cell Biology.
13. Explain the difference between prokaryotic and eukaryotic cells.
14. Describe the method of DNA replication.
15. Give brief note on stem cell therapy.
16. Explain the hormones and receptors in cell signaling.

SECTION – C

Answer any **TWO** of the following:

(2x20=40 marks)

17. Explain the principle and working mechanism of Electron microscope.
18. Describe the structure and functions of mitochondria.
19. Give an account on protein synthesis.
20. Explain the nuclear transplantation.

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