## LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

# DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

## FIFTH SEMESTER - NOVEMBER 2018

#### 16UZO5MC01/ AZ 5516 - MOLECULAR CELL BIOLOGY

Date: 25-10-2018 Dept. No. \_\_\_\_\_ Max. : 100 Marks

Time: 09:00-12:00

#### PART-A

#### **Answer ALL questions:**

 $(10 \times 2 = 20)$ 

- 1. What is Eukaryote?
- 2. What is Annular phase plate?
- 3. Comment on Cell birth.
- 4. What is Peroxisomes?
- 5. Define Carcinogenesis.
- 6. What is Cell theory?
- 7. State the functions of Electron microscope.
- 8. What is mRNA?
- 9. What is DNA repair?
- 10. Comment on Metaplasia.

#### PART-B

#### Answer any FOUR of the following questions:

 $(4 \times 10 = 40)$ 

- 11. Illustrate the Structure of Animal Cell with suitable diagram.
- 12. Give an account on principle and applications of Scanning Electron Microscope.
- 13. Write a brief account on the structure and their functions of Endoplasmic Reticulum.
- 14. Write brief notes on Cell Signalling.
- 15. Explain in detail about Tumour Suppressor Genes
- 16. Write short notes on structure of DNA.

#### PART-C

## Answer any TWO of the following questions:

 $(2 \times 20 = 40)$ 

- 17. Explain the types of Centrifuge and its uses.
- 18. Write an essay on Meiosis and its significance.
- 19. Highlight the steps involved in DNA replication.
- 20. Write an essay on Cancer cells.

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