

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



M.Sc. DEGREE EXAMINATION – ZOOLOGY

SECOND SEMESTER – APRIL 2019

17/18PZO2MC01– MOLECULAR CELL BIOLOGY

Date: 03-04-2019
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART – A (10x2= 20 Marks)

Answer All questions

1. What is isoelectric point?
2. Define transduction.
3. Comment on zonulaoccludens.
4. Distinguish exosmosis from endosmosis.
5. What is soluble and insoluble RNA?
6. Define codon and anticodon.
7. Comment on exotoxin and endotoxin.
8. What is known as pyknosis?
9. Explain X- linked inheritance with examples.
10. Define DNA finger printing.

PART- B (4x10= 40 Marks)

Answer any FOUR questions

11. Give an account on autoradiography and its uses.
12. What are lysosomes? Describe the structure and functions of lysosomes.
13. Describe the protein translocation into ER lumen
14. Enumerate DNA repair mechanism.
15. Explain the role of G-Protein in signal transduction.
16. What is pedigree? How will you construct pedigree chart for various inheritance.

PART –C (2x20= 40 Marks)

Answer any TWO questions

17. a) Describe the ultra structure of nucleus .
b) Explain the functions of nuclear membrane and nuclear pore.
18. a) Define Wobble hypothesis.
b) Write an essay on eukaryotic protein synthesis.
19. a) What is RNA splicing?
b) Give a detailed account on the structure and functions of different types of RNA.
20. a) Distinguish numerical aperture and resolving power.
b) Classify microscopes and write a detailed account on TEM and SEM.
