 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION - **ZOOLOGY**

SECOND SEMESTER – APRIL 2011

# ZO 2814 / 2808 - CELL AND MOLECULAR BIOLOGY

Date : 02-04-2011 Dept. No. Max. : 100 Marks

Time : 1:00 - 4:00

PART – A

Answer all (10x2 = 20 marks)

1. Differentiate malignant and benign tumour.
2. What is radiation genetics?
3. Comment on cystic fibrosis.
4. What is the primary function of ribosome?
5. Comment on southern blot.
6. Define replicon.
7. What is a genetic disorder?
8. Comment on telomeres.
9. What are the types of oncoproteins?
10. Comment on non-permissive cells.

PART – B

Answer any four (4x10 = 40 marks)

1. Write notes on the effects of radiation in DNA.
2. Explain the role of ribosomes and peroxisomes.
3. Give an account on karyotyping.
4. Write notes on biogenesis of mitochondria and mitochondrial DNA.
5. What are the properties of genetic code? Explain.
6. Give an account of methods of gene sequencing.

PART – C

Answer any two (2x10 = 40 marks)

1. Write an essay on tumour suppressor genes.
2. Differentiate prokaryotic and eukaryotic cell organization.
3. Give an account of DNA finger printing technology.
4. Explain the genetics of ageing process.

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