



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION - ZOOLOGY

SECOND SEMESTER – APRIL 2013

ZO 2958 - BIOPHYSICS & RADIATION BIOLOGY

Date : 04/05/2013

Dept. No.

Max. : 100 Marks

Time : 9:00 - 12:00

PART - A

10 x 2 = 20 Marks

Answer **ALL** the questions.

1. Comment on Isoelectric point.
2. Differentiate viscosity from surface tension.
3. What are chromosomal aberrations?
4. Comment on radiation.
5. Differentiate SEM from TEM.
6. Differentiate Osmosis from diffusion.
7. Define refractive index.
8. Comment on CT scan?
9. What is Gibb's free energy?
10. What is plasmolysis?

PART – B

4 x 10 = 40 Marks

Answer any **FOUR** of the following:

11. Write notes on TLC.
12. Explain LASER and its application.
13. Write an account on HPLC.
14. What are the uses of X-rays?
15. Explain NMR and its significance.
16. Give an account of GM counter.

PART – C

2 x 20 = 40 Marks

Answer any **TWO** of the following:

17. Write an essay on radiation and cancer.
18. Describe electrophoresis.
19. Explain microscopy and its significance in Biology.
20. Give an account on chromatography.
