

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



M.Sc. DEGREE EXAMINATION – ZOOLOGY

SECOND SEMESTER – APRIL 2016

ZO 2958 – BIOPHYSICS & RADIATION BIOLOGY

Date: 27-04-2016

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

PART - A

(10 × 2 = 20 Marks)

Answer **ALL** the questions.

1. Write a short note on refractive index.
2. What is MRI scan?
3. Define ploidy.
4. Differentiate viscosity and surface tension.
5. Comment on zero mobility of ions.
6. Define refractive index.
7. Differentiate SEM and TEM.
8. What is diffusion?
9. Explain the process of haemolysis.
10. What is Gibb's law?

PART – B

(4 × 10 = 40 Marks)

Answer any **FOUR** of the following

11. Write a paragraph on immuno electrophoresis.
12. Write a note on auto radiography.
13. NMR and its significance.
14. Give an account of mutations and explain its impact.
15. What are the uses of X-rays?
16. Give an account of GM counter and elaborate its significance.

PART – C

(2 × 20 = 40 Marks)

Answer any **TWO** of the following

17. a) Distinguish TLC and HPLC.
b) Give an account of HPLC.
18. Define cancer and elaborate the cancer biology and its significance.
19. Discuss LASER techniques and its applications.
20. Write an essay on microscopy and its significance in Biology.

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