



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – ZOOLOGY

SECOND SEMESTER – APRIL 2018

17PZO2MC02- RADIATION BIOLOGY

Date: 19-04-2018
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART- A

Answer ALL the questions.

(10×2 = 20 marks)

01. Comment on ionizing radiation.
02. Why elements are radioactive?
03. Differentiate radiosensitiser from radioprotector.
04. Define surviving fraction.
05. Comment on LET.
06. Mention any four Radiation protection committees.
07. What is latent period?
08. Differentiate relative risk from absolute risk model of carcinogenesis?
09. Comment on Bystander effect.
10. What is deterministic effect?

PART- B

Answer any FOUR questions. (4×10 = 40 marks)

11. Write short notes on radiation quantities of absorbed dose, effective dose, equivalent dose and exposure.
12. Explain the Oxygen effect.
13. Describe the factors affecting the cell survival curve.
14. Write short notes on ALARA.
15. Describe heredity effects of radiation.
16. Explain radiation protection.

PART- C

Answer any TWO questions.

(2×20 = 40 marks)

17. Write an essay on cellular effect of radiation.
18. What is radioactivity? Explain the various measurement methods of radioactivity.
19. Explain acute radiation syndrome and late effect.
20. How to protect the embryo/fetus from radiation? Explain.

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