



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc.DEGREE EXAMINATION –ZOOLOGY

SECOND SEMESTER – APRIL 2019

17/18PZO2MC02– RADIATION BIOLOGY

Date: 05-04-2019
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART- A

Answer ALL the questions.

(10×2 = 20 marks)

01. What is Effective dose?
02. Differentiate Radiosensitiser from Radioprotector.
03. Comment on LET.
04. List out any four potentially lethal damage symptoms.
05. Differentiate single strand break from double strand break in DNA.
06. Comment on Mitotic death.
07. Differentiate relative risk from absolute risk model of Carcinogenesis?
08. Comment on Doubling dose.
09. What is Occupational exposure?
10. List out any four principles of Radiation therapy.

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. Give an account on Time scale.
13. Describe about Target theory.
14. Write short notes on treatment of Radiation victims.
15. Give an account on any four Radiation protection committees.
16. Write a paragraph on radiation induced Cancer.

PART- C

Answer any TWO questions.

(2×20 = 40 marks)

17. What is cell fractionation? Describe the Cell survival curve.
18. What is radioactivity? Explain the various measurement methods of Radioactivity.
19. How to protect the embryo/fetus from Radiation? Explain.
20. Explain Acute radiation syndrome and late effect.
