



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – ZOOLOGY

SECOND SEMESTER – APRIL 2017

16PZO2MC02- RADIATION BIOLOGY

Date: 21-04-2017
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

Part A

Answer ALL the questions

(10×2=20 Marks)

1. Define effective dose.
2. Comment on radio isotope.
3. Differentiate deterministic effects from stochastic effects.
4. Comment on occupational exposure.
5. Comment on latent period?
6. What is acute radiation syndrome?
7. Define radiosensitivity.
8. Comment on Radioprotector.
9. Differentiate LD50 and LC50.
10. Comment on ICRP.

Part B

Answer any FOUR questions

(4×10=40 Marks)

11. Write notes on mitotic death and apoptosis.
12. What are radioactivity measurements? Explain Geiger-Muller counter.
13. Give an account on Radiation-induced injury to the gonads.
14. Describe radiation cell kinetics.
15. Give an account on oxygen effect.
16. Describe the ALARA principles.

Part C

Answer any TWO questions

(2×20=40 Marks)

17. Explain DNA damage and repair mechanism.
18. Describe radiation carcinogenesis.
19. Write an essay on radiation protection.
20. Describe hereditary effects of radiation.

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