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BTH 551

Fourth Semester M.Sc. Degree Examination, September/October 2022 BIOTECHNOLOGY Animal Biotechnology

Time : 3 Hours

Max. Marks: 70

PART – A

- 1. Write short notes on **any ten** of the following (**not** exceeding **1** page **each**). (10×2=20)
 - a) RPMI 1640.
 - b) Collagenase.
 - c) Cell line.
 - d) HAT medium.
 - e) Pluripotency.
 - f) Histotypic culture.
 - g) Sex specific markers.
 - h) Transgenic organism.
 - i) Cryopreservation of embryos.
 - j) IVF.
 - k) Vaccine.
 - I) Gene therapy.

PART – B

Write explanatory notes on any five of the following (not exceeding 3 pages). (5×6=30)

- 2. The equipments required for the animal cell culture.
- 3. Measurements of cell viability and cytotoxicity assays.
- 4. Cell separation techniques.

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- 5. Somatic cell fusion.
- 6. ART.
- 7. Plasmids.
- 8. Gene knockout.

PART – C

Write long answers on **any two** of the following (**not** exceeding **7** pages). (2×10=20)

- 9. Write an account on primary culture techniques.
- 10. Give an account on stem cell culture and its applications in medicine.
- 11. Describe the production of transgenic fishes.
- 12. Discuss various methods of gene transfer.