

**B. Sc. Bio-Technology Examination,
June-2023**

**ANIMAL BIO-TECHNOLOGY
(B-302)**

Time : 3 Hours]

[Maximum Marks : 75

*Note : Attempt any five questions. All questions carry
equal marks.*

1. Describe the basic cell culture techniques and also explain requirement of different ingredients of cell culture media.
2. Discuss the role of biotechnology in disease diagnosis and disease treatment.
3. What is gene therapy ? Describe the types of gene therapy.
4. Discuss the different steps involved in development of transgenic animals.

NS-3474

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(2)

5. Write short notes on any **three** of the following :

- (i) Xenotransplantation
- (ii) Organ transplantation
- (iii) Transplanting culture cells
- (iv) Sexing of embryos

✓ 6. What are cell lines ? Explain characterization and maintenance of stem cells.

7. Describe the role of growth factors promoting proliferation of animal cells.

8. Write short notes on any **three** of the following :

- (i) Epigenetic inheritance
- (ii) Production of artificial tissue
- (iii) Cryopreservation of embryo
- (iv) Weismann barrier

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9. Describe the different methods of transgenic delivery. How it is improving transgene integration efficiency.

✓ 10. Write short note on any **two** of the following :

- (i) Adenoviruses
- (ii) Biotechnology in fertility control
- (iii) Vectors in gene therapy

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