

Roll No.

94172

B. Sc. Bio-Technology 6th Semester (New Scheme) Examination – May, 2023

ANIMAL BIOTECHNOLOGY

Paper : BT-602

Time : Three hours]

[Maximum Marks : 40

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt five questions in all, selecting one question from each Unit. Question No. 1 is compulsory. All questions carry equal marks.

1. Write the short notes on the following : $1 \times 8 = 8$

- (a) Source of stem cells
- (b) Properties of cloning vector
- (c) Surrogate Mother
- (d) Azoospermia
- (e) Theileriosis
- (f) Laparoscopy
- (g) Therapeutic agent
- (h) Ethical issue

UNIT - I

- ✓ 2. Describe the procedure and application of Microinjection in gene transfer. 8
3. Write the notes on any *two* : $4 \times 2 = 8$
- (a) Steps of gene transfer in animals
 - (b) Characteristics of stem cells
 - (c) Role of viruses in gene transfer technology

UNIT - II

4. Describe the merit and demerit of transgenic animals. 8
- ✓ 5. Write the notes on : $4 \times 2 = 8$
- ✓ (a) Procedure of production of transgenic mice
 - ✓ (b) Coccidiosis

UNIT - III

- ✓ 6. Write the notes on any *two* : $4 \times 2 = 8$
- ✓ (a) Benefits of artificial insemination
 - ✓ (b) Requirement of embryo transfer
7. Should animal and human cloning be permitted or not explained in detail. 8

UNIT – IV

8. Write the notes on :

4 × 2 = 8

(a) Molecular engineering

(b) Role of ethical committee in medicine

9. What is gene therapy ? Describe the various types of gene therapy in detail. 8
