Code No: 5036/A/R19

## **FACULTY OF SCIENCE**

B.Sc. (CBCS) III-Year (VI-Semester) Regular & Backlog Examinations, June-2023
Biotechnology-VI (A)
(Animal Biotechnology)

Time: 3 Hours Max Marks: 80

## SECTION-A

(4x5=20 Marks)

Answer any Four questions from the following

- 1. Pluripotent Stem cells.
- 2. Artificial insemination.
- 3. Market assisted selection.
- 4. RFLP.
- 5. Xenograft model.
- 6. Transfection studies.

## SECTION-B

(4x15=60 Marks)

Answer all the following questions

7. (a) What are the characteristic features of cell lines and the maintenance.

(OR)

- (b) Mention the methods for separation and establishment of various cell lines.
- 8. (a) What is Animal Breeding? Describe its advantages and limitations.

(OR)

- (b) What is IVF? How is embryo sexing done?
- 9. (a) What are molecular markers? Describe the various types of markers.

(OR

- (b) How do you identify and isolate the gene of interest?
- 10. (a) What are the different animal models used in research? Mention their significance.
  - (b) Discuss the Generation of gene knock-out mouse model.