

PE-845-CV-19
M.Sc. BIOTECHNOLOGY (4th Semester)
Examination, June 2022
ANIMAL BIOTECHNOLOGY

Time : Three Hours]

[Maximum Marks : 80
[Minimum Pass Marks : 29

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

- 1. Answer the following short answer questions:** **1x10=10**
- (a) Write one physical method for genetransfer.
 - (b) Is light important for Animal cell culture?
 - (c) Can mammalian cells be cultured in glass?
 - (d) Cells identical to parental cell are called.....
 - (e) Should transformed cell have a foreign gene?
 - (f) Which cells are taken for skin cells?
 - (g) Name a product prepared by Animal tissue culture.
 - (h) Write a term which explain "cell suicide".
 - (i) Name a organ which has been successfully grafted after artificial culture.
 - (j) Write name of any one culture medium used for Animal tissue culture.
- 2. Answer the following short type questions:** **2x5=10**
- (a) Animal cell.
 - (b) Mammalian cell culture in vitro.
 - (c) 3D tissue culture.
 - (d) Transgenic animals.
 - (e) Application of cell culture.

Section-B

15x4=60

Answer the following Long-Answer questions:

- 3. Describe equipment's and materials used in animal cell culture.**
OR
Describe chemical methods of gene transfers.
- 4. Describe scaling up in animal cell culture.**
OR
Describe cell cloning in detail.
- 5. Describe somatic cell genetics.**
OR
Describe vaccines developed against AIDS.
- 6. Describe transgenic models in animal tissue culture.**
OR
Describe Ethical issues related to animal biotechnology.