

Total No. of Questions :3]

SEAT No. :

[Total No. of Pages :2

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[5232] - 301

M.Sc. - II

BIOTECHNOLOGY

BT-301: Animal Biotechnology

(2013 Pattern) (Semester - III) (Credit System)

Time : 3 Hours]

[Max. Marks :50

Instructions to the candidates:

- 1) All questions are compulsory.*
- 2) Neat diagrams must be drawn wherever necessary.*
- 3) Figures to the right indicate full marks.*

Q1) Answer the following (any four) :

[4×5=20]

- a) Write in detail the principle and significance of sterilization in ATC.
- b) Give the composition and applications of Basic salt solution.
- c) Write a note on cell transformation.
- d) Write a note on Embryo transfer technology.
- e) Write a note on molecular markers and their application in Animal Biotechnology.
- f) Importance of biosafety and bioethics in animal biotechnology.

Q2) Write short notes on (any four) :

[4×5=20]

- a) Cell cloning.
- b) Advantages of histotypic culture over organ culture.
- c) Non-enzymatic methods of tissue disaggregation.

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- d) Methods of stem cell purification.
- e) Any one method of semen collection from bulls.
- f) Application of ATC in production of recombinant proteins.

Q3) Answer any one :

[1×10=10]

- a) Describe in detail any one method to generate transgenic mouse.
- b) Write a note on long term maintenance and characterization of embryonic stem cells.

