

7. Discuss in detail about the problems and ethics associated with gene therapy. 11
8. What is gene therapy ? Discuss the different types of gene therapy studied by you. 11

SECTION—C

9. Explain the following :
- (i) Retroviruses
 - (ii) Stem cell
 - (iii) Advantages of transgenic animals
 - (iv) Name the animals that have been cloned
 - (v) Name the transgenic products of sheep
 - (vi) Coccidiosis
 - (vii) Trypanosomiasis
 - (viii) Cloning
 - (ix) Gene disruption
 - (x) Transgenic goat
 - (xi) Gene targeting
 - (xii) Dicer enzymes
 - (xiii) Gene silencing
 - (xiv) Antisense therapy
 - (xv) Public perception about gene therapy. 15×2=30

Roll No.

Total No. of Pages : 2

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CS/2111

ANIMAL BIOTECHNOLOGY—BHB-25

Semester—V

Time Allowed : Three Hours]

[Maximum Marks : 74

Note :- Attempt *two* questions each from Sections A and B and Section C is compulsory.

SECTION—A

1. Define Microinjection. Discuss any method of gene cloning in animal cell. 11
2. What is stem cell ? Describe the methods of embryonic stem cell-mediated gene transfer. 11
3. Discuss the application of biotechnology for the control of Foot and Mouth animal diseases. 11
4. What do you understand by the term "Transgenesis" ? Write down an essay on any two transgenic animals studied by you. 11

SECTION—B

5. What do you mean by animal propagation ? Discuss in detail method of artificial insemination in detail. 11
6. Write an essay on the embryo transfer technique. 11