

Exam. Code : 107406

Subject Code : 2332

B.Sc. (Bio Technology) 6th Semester

BT-3 : ANIMAL BIOTECHNOLOGY

Time Allowed—3 Hours] [Maximum Marks—40

Note :— Section A (1×8 marks) is compulsory. Section B (5×4 marks). Attempt any 5 questions. The answer should not exceed **two** pages. Section C (6×2 marks). Attempt any 2 questions. The answer should not exceed **five** pages.

SECTION—A

(Compulsory)

Write a brief account of the following :

1. Full form of BHK and B 16 cell line
2. Differentiation
3. Transfection
4. Transgenics
5. Monoclonal antibody
6. Marker on stem cells
7. How to cut the DNA at particular sites ?
8. Define regulatory protein.

SECTION—B

1. Which characteristic features of the cell line are studied and described while labeling it. Explain these features of WI-38 and 3 T3.
2. Which changes are brought in a cell after differentiation ?
3. How to perform Lipofaction ?
4. What are expression vectors ?
5. Materials used for microcarrier cultures and how to make them.
6. How embryonic stem cells are better than adult stem cells for culturing ?
7. Give the role of genetic engineering in production of vaccines.
8. How to raise transgenic cattle for milk production ?

SECTION—C

1. Define organ culture and cell culture. Describe the methods to raise organ cultures.
2. Describe the DEAE Dextran mediated and reteroviral infection method of transfection.
3. How to scale up anchorage dependent cultured cells ?
4. Write a note on Animal cloning and ethics involved in it. And also Embryo transfer technology.