

(20518)

Roll No.

B. Sc. (Biotech.)-III Year

NS-3474**B. Sc. (Biotechnology) Examination, May 2018****Animal Biotechnology****(B-302)****(New)***Time : Three Hours]**[Maximum Marks : 75*

Note : Answer any *Five* questions. All questions carry equal marks.

1. Elaborate the types of animal tissue culture with their characteristics. Differentiate between monolayer and suspension cultures.

2. Describe the various types of growth factors in animal cell culture. 15
3. Write short notes on any two of the following :
 - (i) Applications of stem cells
 - (ii) Targeted gene therapy
 - (iii) Oocyte recovery. $7\frac{1}{2} \times 2 = 15$
4. What is antisense gene therapy ? Describe the barriers related to gene delivery ? 15
5. Discuss the maintenance and cloning of cell lines with suitable methods. 15
6. Describe the various steps of embryo transfer in animals with their advantages. 15

7. Write short notes on any two of the following :
- (i) Stirred Bioreactor
 - (ii) Platelet derived growth factor
 - (iii) Adenoviruses. 7½×2=15
8. Discuss the role of Biotechnology in disease diagnosis. 15
9. Discuss the cryopreservation techniques with special reference to semen and embryo. 15
10. Describe the methods of transgenesis with precautions at each step. 15