



25019900

QP CODE: 25019900

Reg No :

Name :

**B.Sc DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY
CHANCE EXAMINATIONS, FEBRUARY 2025**

Fourth Semester

B.Sc Botany and Biotechnology Model III Double Main

Core Course - BO4CRT20 - ANIMAL BIOTECHNOLOGY & NANOTECHNOLOGY

2017 Admission Onwards

0A245559

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What is the osmolarity of standard animal cell culture medium ?
2. Name two pharmaceutical proteins produced by animal cell culture.
3. What are attenuated recombinant vaccines?
4. Write main benefits of cryopreservation of sperms.
5. What are main advantages of inducing superovulation?
6. Give any two applications of transgenic sheeps.
7. What is microinjection ?
8. Give principle of optica rotatory dispersion.
9. What is tight junction?
10. What is meant by biofunctionality?
11. What are actuators?
12. What is the difference between bottom up and top down synthesis?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Comment on growth pattern of animal cell in invitro.





14. Write on culturing of different tissues and its application.
15. Give main applications of ELISA technique.
16. Describe on artificial insemination.
17. With relevant example explain how gene therapy has helped in treating diseases.
18. Comment on primary and secondary structure of proteins.
19. How do the physical and chemical stimuli effect the cell function?
20. Explain the synthesis proteins in biological systems.
21. Write short notes on drug delivery systems.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Write a note on different animal cell culture contaminants.
23. Write in detail on hybridoma technology.
24. Write essay on embryo splitting and implantation in animals.
25. Explain the strategies of metabolic engineering.

(2×10=20)

