



QP CODE: 25003388



Reg No :

Name :

**B.Sc DEGREE (CBCS) SPECIAL REAPPEARANCE EXAMINATIONS, FEBRUARY
2025**

Fifth Semester

B.Sc Biotechnology Model III

CORE COURSE - BT5CRT14 - ANIMAL BIOTECHNOLOGY

2022 Admission Only

3A66C1D5

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What are the minimum requirements in an animal tissue culture laboratory?
2. What is LAF?
3. What is the main function of hormones in media?
4. Name the commonly used pH indicator in animal cell culture.
5. Name two enzymes used for disaggregation of cells in animal cell culture.
6. Characteristics of cell line.
7. Difference between established and continuous cell line.
8. Procedure of organ culture.
9. Insect and virus culture.
10. What is heterokaryon?
11. What is vaccine?
12. Explain the various method of transgenesis.

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. Write the role of tissue culture in medical research.





14. Briefly write down the routes of contamination.
15. Explain chemically defined media.
16. How do PDGF affect the growth of cells?
17. Write in detail about secondary cell culture.
18. What are stem cells? Describe the applications of stem cell culture.
19. Describe the differences between monolayer and suspension culture.
20. Explain knock-out and knock-in technology.
21. Write an essay on the applications of animal cell culture in medical and cancer research.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Describe and differentiate serum containing media and serum free media.
23. Write an essay on the origin and characteristics of commonly used animal cell lines.
24. Explain bioreactors and describe its structure and importance in animal cell culture.
25. Explain in detail the production of specific metabolites.

(2×10=20)

