



23108092

QP CODE: 23108092

Reg No :

Name :

B.Sc DEGREE (CBCS) SPECIAL SUPPLEMENTARY EXAMINATIONS, APRIL 2023

Fifth Semester

B.Sc Biotechnology Model III

CORE COURSE - BT5CRT14 - ANIMAL BIOTECHNOLOGY

2020 Admission Only

9D9A7AB8

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. Name the first human cell line established.
2. What is containment room?
3. Name a commonly used biological fluid in natural media.
4. Name a cell adhesion molecule.
5. Name two substrates commonly used for culture of anchorage dependent cells.
6. What is a cell line?
7. Commonly used cell lines.
8. Embryonic stem cells.
9. Fluidised bed culture.
10. Tissue plasminogen activator.
11. Mention the importance of transgenic fish.
12. Mention the role of animal cell culture in medical and cancer research.

(10×1=10)

Part B

*Answer any **six** questions.*

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





13. Differentiate between Anchorage dependent and Anchorage independent cells.
14. Give the importance of microscope in tissue culture works.
15. Write down the advantages and disadvantages of serum containing media.
16. Give a note on the inhibitory and stimulatory role of growth factors.
17. Write a note on established cell lines.
18. Explain how cells can be immobilized.
19. Write a short note on insect and virus culture.
20. Explain the production of monoclonal antibody.
21. Give an account of vaccine production.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain the importance of hormones in cell culture.
23. Write an essay on the characteristics of cells in culture.
24. Describe the 3D culture. Explain the techniques and applications of 3D culture.
25. Explain knock-out technology and describe the production and application of knock-out mouse.

(2×10=20)

