20100035

QP CODE: 20100035

Reg No : .....

Name : .....

BSc DEGREE (CBCS) EXAMINATION, FEBRUARY 2020

Fifth Semester

B.Sc Biotechnology Model III

Core Course - BT5CRT14 - ANIMAL BIOTECHNOLOGY

2017 Admission Onwards

2331E3F8

Time: 3 Hours Maximum Marks :60

Part A

*Answer any **ten** questions.*

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

1. Differentiate between HEPA and HPA filter.
2. What is the principle behind water purification system?
3. What are plasma clots?
4. Give an example for growth factor that promote in vitro cell proliferation.
5. How tissues can be isolated and disaggregated for cell culture?
6. Characteristics of cell line.
7. What is a cell line?
8. Embryonic stem cells.
9. Mention the application of 3D culture.
10. What is cell cultured based vaccine?
11. What is secondary metabolites?
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. Why did Ross Harrison choose frog as his source for tissue culture works?
14. Write a note on culture vessels and the factors affecting the choice of selecting a vessel.
15. What are the different hormones in media?
16. Write a note on animal cell culture media.
17. How continuous cell culture can be established and maintained? Explain.
18. Write a short note on air lift fermentor.
19. Write a short note on insect and virus culture.
20. Explain how a transgenic cow can be produced?
21. Explain knock-out technology.

(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. Write an essay on suspension cultures and immobilized cultures.
25. Explain in detail the production of monoclonal antibodies and its significance.

(2×10=20)