

C 60127

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Name.....

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2019

(CUCBCSS)

Biotechnology

BTY 6B 14—ANIMAL BIOTECHNOLOGY

Time : Three Hours

Maximum : 80 Marks

Section A

*Answer any **two** out of four questions in about 1,500 words.*

Each question carries 10 marks.

1. How is disaggregation of tissue carried out ?
2. What are the requirements for animal cell tissue culture ?
3. Different uses of cell culture and its products.
4. How is a continuous cell line established ?

(2 × 10 = 20 marks)

Section B

*Answer any **seven** out of fourteen questions in about 750 words.*

Each question carries 5 marks.

5. What are the different types of cell culture ?
6. How are biochemicals produced from cell lines ?
7. How is a cell line immortalized ?
8. Role of CO₂ in animal cell culture.
9. Serum free medium.
10. Ambient temperature for cell culture.
11. What is a hybridoma ?
12. Different type of cell lines.
13. Methods of sterilization.
14. Inverted microscope.

Turn over

15. Graph indicating growth of animal cells in culture.
16. Microcarrier beads.
17. HAT medium.
18. Cell viability measurement.

(7 × 5 = 35 marks)

Section C

*Answer **all** questions in about 300 words.*

Each question carries 3 marks.

19. Coulter counter *r*.
20. Substrates of cell growth.
21. Suspension culture.
22. Contact inhibition.
23. FACS.

(5 × 3 = 15 marks)

Section D

*Answer **all** questions in about 200 words.*

Each question carries 2 marks.

24. Chelating agents.
25. CHO cell line.
26. Use of Epstein Barr virus in cell immortalization.
27. Roller bottles.
28. Organ culture and cell culture.

(5 × 2 = 10 marks)