

**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 CO<sub>2</sub> 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)