TDC Even Semester Exam., 2019

BIOTECHNOLOGY

(Honours)

(4th Semester)

Course No. : BTCH–402

(Animal Cell Culture)

Full Marks : 35
Pass Marks : 12

Time : 2 hours

The figures in the margin indicate full marks for the questions

1. What is anchorage-dependent growth? Differentiate between the characteristics of anchorage-dependent and anchorage-independent growths of cells in primary culture. 2+5=7

OR

2. Write short notes on the following : 3½+3½=7

(a) Continuous and established cell lines

(b) Types of growth media

3. What is common growth media for culture of cells? Write a note on basic techniques of animal cell culture and their applications. 2+5=7

OR

4. Write short notes on the following : 3½+3½=7

(a) Metabolic capability of animal cells

(b) Primary and secondary cultures

5. Give an account of expression of mammalian genes in pro- and eukaryotic system. 3½+3½=7

OR

6. Write short notes on the following : 3½+3½=7

(a) DNA cloning in mammalian cell

(b) HAT selection

7. What is growth kinetics? Explain the growth kinetics of cell in culture. 2+5=7

OR

8. Write short notes on the following : 3½+3½=7

(a) Organ culture

(b) Balanced salt solution

9. What is cell fusion? Give an account on the role of antibiotic resistance and selectable marker in cell culture. 2+5=7

OR

10. Write short notes on the following : 3½+3½=7

(a) Gene expression studies

(b) Transplantation of cultured cells

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