

TDC Even Semester Exam., 2019

BIOTECHNOLOGY

(Pass)

(6th Semester)

Course No. : BTCP-601

(Animal Cell Culture and Animal Biotechnology)

Full Marks : 35

Pass Marks : 12

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

1. Write short notes on the following : $3\frac{1}{2}\times 2=7$

(a) Transplantation of cultured cells

(b) Differentiation of cells

OR

2. Write a note on organ culture. Describe briefly the application of animal cell cultures for studies on gene expression. $3+4=7$

3. Elaborate the commonly used animal cell lines, their origin and characteristics. 7

OR

4. Give an account of growth factors in serum. Write a note on metabolic capabilities of animal cell. $4+3=7$

5. Write short notes on any *two* of the following : $3\frac{1}{2}\times 2=7$

(a) Stimulating natural condition for growing animal cell

(b) History of development of cell culture

(c) Secondary culture

(d) Continuous cell lines

6. Write short notes on the following : $3\frac{1}{2}\times 2=7$

(a) Babies of specific sex

(b) Chromosome jumping

OR

7. Give an account of monoclonal antibodies. Add a note on *in vitro* fertilization. $4+3=7$

(3)

8. Define animal cloning. Give an illustrated account of virus vaccines and recombinant proteins. $2+5=7$

OR

9. Write notes on the following : $3\frac{1}{2}\times 2=7$
- (a) Embryo transfer
 - (b) Genome maps
