

Exam. Code : 107405

Subject Code : 1744

B.Sc. Biotechnology 5th Semester

BT-3 : ANIMAL TISSUE CULTURE

Time Allowed—3 Hours] [Maximum Marks—40

Note :— Attempt *five* questions in all, selecting at least *one* question from each section. The **fifth** question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. With well labelled diagram indicate the layout of ATC laboratory and mention the role of each instrument. 8
2. (i) What are the major advantages of ATC ? 4
(ii) Describe briefly the method of sterilization of culture media for ATC. 4

SECTION—B

3. Elaborate on safety measures needed in ATC laboratory. 8
4. In a tabular form mention the salient features of P2 and P3 facility. 8

SECTION—C

5. Write notes on the following :
(i) Balanced salt solution 4
(ii) Conditioned media. 4

6. Write notes on composition, applications, advantages and disadvantages of the following :

- (i) Serum supplemented media
- (ii) Serum free media. 2×4=8

SECTION—D

7. (i) Distinguish between finite and continuous cell lines. 4
(ii) Write a note on primary culture. 4
8. With well labelled diagram explain different phases of cell growth. How will you determine the following :
(i) In vitro age
(ii) Cell counting ? 4+2+2=8