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Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (BT) (Sem.-5)

**ANIMAL CELL CULTURE & BIOTECHNOLOGY**

Subject Code : BTBT-502-18

M.Code : 78236

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

**Answer briefly :**

- 1) What is cell differentiation?
- 2) What do you understand by a complete media?
- 3) What is subculturing?
- 4) Define labeling index.
- 5) What do you understand by generation time?
- 6) What are cell banks?
- 7) What is molecular pharming?
- 8) What are transgenic animals?
- 9) Give three applications of animal tissue culture.
- 10) Define cell lines.





**SECTION-B**

- 11) Explain the process of cell adhesion and proliferation.
- 12) Discuss the layout of an animal tissue culture laboratory.
- 13) Discuss various steps involved in preparation of primary culture.
- 14) Write a note on cell cloning and cell separation.
- 15) Explain various gene transfer technologies in mammalian cells.

**SECTION-C**

- 16) Give a detailed account of various culture media used in animal tissue culture.
- 17) What are the various techniques for measurement of viability and cytotoxicity?
- 18) Write short notes on :
  - a) Cryopreservation of cell lines
  - b) ES and microinjection.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**

