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Total No. of Pages : 02

Total No. of Questions : 09

**B.Sc.(BT) (2013 to 2017) (Sem.-5)**  
**ANIMAL CELL CULTURE AND BIOTECHNOLOGY**  
**Subject Code : BSBT-301**  
**M.Code : 47056**

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**

**Q.1 Define briefly :**

- i) Anchorage dependent cells
- ii) Tissue culture
- iii) Monoclonal Antibodies
- iv) Recombinant proteins
- v) Primary culture
- vi) Immobilized Culture
- vii) Cell line
- viii) Generation Number
- ix) Embryo culture.
- x) Density Limitation of Growth

### SECTION-B

- Q2. Differentiate between Monolayer and Suspension Culture.
- Q3. List Steps in Initiation of Primary culture.
- Q4. Discuss Transfection methods for transgene introduction.
- Q5. Write a note on Test Tube Baby.
- Q6. Discuss Recombinant protein production from cell culture.

### SECTION-C

- Q7. Discuss the advantages and limitations of Embryo transfer in cattle.
- Q8. Discuss Hybridoma technology for Cell Culture products .
- Q9. Deliberate on role of bioethics and guidelines in animal cell culture research.

**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.**