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Total No. of Pages : 02

Total No. of Questions : 09

**B.Sc.(BT) (2014 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****Q1. Define briefly :**

- a) Monolayer culture
- b) Histotypic culture
- c) Hybrid Antibodies
- d) Cell Cultures
- e) Cell line
- f) Biolistic gun method
- g) Recombinant proteins
- h) Generation number
- i) Transfection
- j) In vitro fertilization

### SECTION-B

- Q2. Differentiate between Suspension and Monolayer cultures.
- Q3. Write a note on immobilized cultures.
- Q4. Discuss steps in initiation of primary culture.
- Q5. Write a note on Embryo transfer.
- Q6. Discuss about natural and artificial media used for cell culture.

### SECTION-C

- Q7. Elaborate on production of monoclonal antibodies.
- Q8. What are transgenic animals? Discuss various methods of transfection.
- Q9. Write about bioethical considerations and guidelines for 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.**