

Code: R7422301

R07

B.Tech IV Year II Semester (R07) Supplementary Examinations January 2014

ANIMAL CELL SCIENCE AND TECHNOLOGY

(Biotechnology)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain briefly on cell separation.
(b) Describe cell transformation.
- 2 (a) Explain cell culture based on vaccines.
(b) Describe briefly measurement of cell death.
(c) Write briefly about simple growth medium.
- 3 Describe in detail the methodology and applications of three dimensional cultures.
- 4 (a) Describe organ culture.
(b) Explain briefly the steps involved in cell cloning.
(c) Write briefly about somatic cell genetics.
- 5 (a) Explain briefly biology and characterization of cultured cells.
(b) Write the applications of animal cell culture.
(c) Describe the role of CO₂ in preparation of culture media.
- 6 (a) Describe the structure and organisation of animal cell.
(b) Explain the serum free defined media and its applications.
- 7 Explain in detail the basic techniques involved in invitro mammalian cell culture.
- 8 (a) What are different methods used to measure viability of cells?
(b) Explain briefly the maintenance of cell culture.
(c) Describe briefly the primary and established cell line cultures.
