

Q-2 Attempt ANY SEVEN from the following: (14)

1. Explain the role of CO₂ incubator in Animal tissue culture.
2. Enlist the applications of animal biotechnology.
3. Write about different types of balanced salt solutions.
4. What are the major differences between monolayer culture and suspension culture?
5. What is passaging? Enlist the criteria for passaging.
6. How attenuated vaccines are different from inactivated vaccines?
7. Enlist the cell viability and cytotoxicity assays.
8. What is multiple ovulation and embryo transfer (MOET)?
9. Comment upon the technique of 'artificial insemination' in animals.

Q-3 (a) Explain the role of serum in animal tissue culture. (06)
(b) Discuss the constituents of animal tissue culture media. (06)

OR

(b) Write an explanatory note on sterilization techniques. (06)

Q-4 (a) Explain trypsinization techniques for tissue disaggregation. (06)
(b) Give a detailed account on Organ culture. (06)

OR

(b) Enlist cell separation methods and add a note on FACS. (06)

Q-5 (a) Describe hybridoma technology for the production of monoclonal antibody. (06)
(b) Enlist the route and sources of contaminations and give brief account on microbial contaminants. (06)

OR

(b) Enlist the different techniques of cell viability and explain MTT assay for cytotoxicity. (06)

Q-6 (a) Explain the basic steps for the production of transgenic animal. (06)
(b) Write notes on followings:
1. Super ovulation technique. (03)
2. Applications of transgenic animals. (03)

OR

(b) Write an explanatory note on In-vitro fertilization. (06)
