

## Chapter 11

### Animal Biotechnology

1. The modern system of animal tissue culture used to investigate
  - (A) biochemistry of cells and toxic compounds on the cells.
  - (B) Mutagenesis and Normal physiology.
  - (C) Potential effects of drugs and drug screening.
  - (D) Transplant and cross contamination in cell.
2. Cells that grow in suitable culture after removing from an organism
  - (A) have infinite life span.
  - (B) contain very heterogenous population of cells.
  - (C) used to maintain optimal cell density.
  - (D) closely resembles the parental tissue.
3. Which of the following is/are produced in animal cell culture?
  - (A) Interferons
  - (B) Callus
  - (C) Mab
  - (D) Vaccines
4. Animal biotechnology involves
  - (A) production of valuable products in animals using rDNA technology.
  - (B) rapid multiplication of animals of desired genotypes.
  - (C) creation of database.
  - (D) alteration of genes to make it more desirable.
5. Identify correct match(es).
  - (A) VERO – Viral vaccines
  - (B) CHO- K<sub>1</sub> – Recombinant sex hormone
  - (C) Kidney cell line – Polio vaccine
  - (D) HeLa – Influenza vaccine
6. Which of the following virus(es) are used as cell fusing agent?
  - (A) Adeno virus
  - (B) Influenza virus
  - (C) Sendai virus
  - (D) Herpes virus
7. Cells used in feeder layer
  - (A) should have ability to divide.
  - (B) have ability to metabolize.
  - (C) these properties are obtained by exposing cells to irradiation.
  - (D) should be viral cell.
8. Cell culture technique became simpler after advent of
  - (A) HeLa cell line.
  - (B) trypsin.
  - (C) cell culture media.
  - (D) antibiotics.

9. Which of the following is/are true regarding animal cell culture technique?  
(A) Lactic acid is source of hydrogen.  
(B) Cells have high requirement of L-glutamine.  
(C) Cholin is necessary for cell adhesion and cytoskeleton.  
(D) Milk of coconut is source of carbon.
10. Which of the following is easy and rapid method to interpret viability of cells in culture system?  
(A) Tetrazolium reduction (B) Neutral red assay  
(C) Fluorescein dye assay (D) Trypan blue dye exclusion

**Answer Key**

1. (A), (B), (C)  
2. (A), (B), (D)  
3. (A), (C), (D)  
4. (A), (B), (D)  
5. (A), (B), (C)  
6. (C), (D)  
7. (A), (B), (C)  
8. (B), (C), (D)  
9. (B), (C)  
10. (A), (D)