



KD-497

Seat No. _____

B. Sc. (Sem. V) Examination

October / November - 2017

Biotechnology : CC-I-10

(Principles of Biotechnology Applied to Animals)

Time : 3 Hours]

[Total Marks : 70

1 Attempt all questions :

1×15=15

- (1) Synthetic tissue culture media of animal
 - (a) Serum
 - (b) MGM
 - (c) Embryo extracts
 - (d) (A) and (C)
- (2) The appropriate pH required to maintain the cell line
 - (a) 7.0-7.5
 - (b) 7.5-7.7
 - (c) 7.0-8.0
 - (d) 7.2-7.5
- (3) Provide gas phase to cell line
 - (a) BOD incubator
 - (b) CO₂ incubator
 - (c) Gas bottles
 - (d) CO₂ buffers
- (4) Serum should be sterilized by which technique ?
 - (a) Microwave
 - (b) Hot Air oven
 - (c) Filter
 - (d) Autoclave
- (5) Transgenic, the foreign gene is known as
 - (a) Mutated
 - (b) Additional
 - (c) Trans
 - (d) True
- (6) _____ and _____ is animal tissue culture products.
- (7) _____ and _____ enzymes used in disaggregation.

- (8) _____ and _____ examples of animal culture media.
- (9) Components of animal tissue media (any two).
- (10) Stem cell functions (any two).
- (11) Expand IVF
- (12) First developed vaccine.
- (13) Name of first clone.
- (14) HeLa cell line derived from cervical cancer cells. (T/F)
- (15) Trypsin is a cellulolytic enzyme. (T/F)

2 Attempt any five questions : 5×5=25

- (1) Describe component of media
- (2) Explain IVF technology
- (3) Describe types of vaccines
- (4) Define cryopreservation
- (5) Explain bioreactor and draw diagram
- (6) Draw and write name of phases of animal cell growth.
- (7) Write types of disaggregation and involved enzyme.

3 Attempt any three questions : 10×3=30

- (1) Explain hybridoma and applications.
- (2) Explain tyipnization and types.
- (3) Write note on "stem cell technology".
- (4) Define transduction and write name of methods.
- (5) Define cultures and write applications of animal tissue culture.