



**AAN-478**

Seat No. \_\_\_\_\_

**B. Sc. (Sem. V) Examination**

**October / November - 2016**

**CC-10 - Biotechnology : Paper - 504**

*(Applied Animal Tissue Culture)*

Time : 3 Hours]

[Total Marks : 70

1 Attempt **all** questions :

**1×15=15**

- (1) Isolation of cells from tissue is
  - (A) Disaggregation
  - (B) Separation
  - (C) Dispersed tissue
  - (D) All
- (2) Successfully done animal tissue culture
  - (A) Carrell
  - (B) Gerberg
  - (C) Harrison
  - (D) Morga
- (3) ET Method expand
  - (A) Eye transfer
  - (B) Embryo transfer
  - (C) Embryonic cell transfer
  - (D) none
- (4) Animal cell staining
  - (A) Typan blue
  - (B) Acid fast
  - (C) Latin blue
  - (D) Congo blue

- (5) Which is true in cloning technology  
(A) gene of two cells  
(B) fertilization of somatic cells  
(C) genetically identical  
(D) All
- (6) Expand IVF \_\_\_\_\_
- (7) \_\_\_\_\_ and \_\_\_\_\_ are examples of animal vectors.
- (8) Serum should be sterilized by \_\_\_\_\_
- (9) \_\_\_\_\_ and \_\_\_\_\_ physiochemical properties of MGM medium.
- (10) \_\_\_\_\_ and \_\_\_\_\_ are types of cell line.
- (11 to 15 Match the following :
- |                          |                     |
|--------------------------|---------------------|
| (11) Media               | (a) Micro chamber   |
| (12) Natural media       | (b) finite          |
| (13) Cryopreservation    | (c) MGM             |
| (14) Low yield cell line | (d) BSS             |
| (15) Organ culture       | (e) liquid nitrogen |

2 Attempt any five questions : 3×5=15

- (1) Define cell line and types.
- (2) Describe transgenic animal with example.
- (3) Define animal tissue applications.
- (4) Explain cryopreservation.
- (5) Draw a diagram of Bioreactor.
- (6) Describe cell growth curve.

**3** Attempt any four questions : **5×4=20**

- (1) Describe properties of animal culture medium.
- (2) Explain hybridoma and give application.
- (3) Describe organ culture and their methods.
- (4) Define bioreactor and explain their parts.
- (5) Describe IVF method and application.

**4** Attempt any two questions : **10×2=20**

- (1) Explain types of enzymatic disaggregation methods.
  - (2) Describe stem cell therapy and stem cell applications.
  - (3) Explain production, method and application of vaccines.
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