



GAF-478

Seat No. _____

B. Sc. (Sem. V) Examination

November/December - 2015

CC-10 : Biotechnology : Paper - 504

(Applied Animal Tissue Culture)

Time : 3 Hours]

[Total Marks : 70

1 Attempted all question..... (1Mark x15=15Marks)

1.1 Disaggregation of animal tissue means

- A. selection of tissues
- B. isolation of tissue
- C. dispersed tissue
- D. All

1.2 Father of animal tissue culture

- A. Carrell
- B. Gerberg
- C. Harrison
- D. Morga

1.3 IVF expand

- A. in vivo fertilization
- B. in vitro fusion
- C. in vitro fertilization
- D. in vivo fusion

1.4 culture media should be sterilized by which method

- A. Autoclave
- B. hot Air oven
- C. Filter
- D. Flame

1.5 cloning technology is considered

- A. gene of two cells
- B. fertilization of somatic cells
- C. genetically identical
- D. All

1.6 _____ and _____ is phases of cell growth curve

1.7 _____ and _____ types of radiation used in sterilization

1.8 _____ and _____ should be sterilized by filters

1.9 _____ and _____ physiochemical properties of medium

1.10 _____ and _____ properties of continuous cell line

1.11 to 1.15 Match the followings

- | | |
|----------------------------------|----------------------|
| 1.11 tissue culture media | A. microwell |
| 1.12 Non synthetic media | B. finite |
| 1.13 High yield cell line | C. MCDB |
| 1.14 Low yield cell line | D. BSS |
| 1.15 organ culture | E. Continuous |

2 Attempted any five questions..... (3Marks x 5= 15Marks)

- 2.1 Define primary culture
- 2.2 Define transgenic animal
- 2.3 Define cloning, give a example of clone.
- 2.4 list out steps of cryopreservation.
- 2.5 Draw a diagram of animal vector
- 2.6 list out all phase of cell growth curve.

3 Attempted any four questions (5Marks x 4= 20 Marks)

- 3.1 Describe physiochemical properties of culture medium
- 3.2 Explain animal cells applications in health care
- 3.3 Describe organ culture and their methods
- 3.4 Draw a diagram of bioreactor and explain their parts.
- 3.5 describe gene transfer methods

4 Attempted any two questions (10Marks x 2= 20 Marks)

- 4.1. Explain various types of disaggregation method and focus on trypsination
- 4.2 Describe stem cell therapy and stem cell applications
- 4.4. Explain cryopreservation and transports of cell line.