P. S. SCIENCE & H. D. PATEL ARTS COLLEGE, KADI

Internal Examination

B. Sc. Semester - V **[Mark : 40**

27-9-2016] **Biotechnology - 504** **[2 Hours**

Applied Animal Tissue Culture

Q-1. Answer all the question. Each question carried 1 mark. 10

(1) Define stem cell.

(2) Define continuous cell line.

(3) Cell cycle represents the phenomenon of cell ____. (proliferation / differentiation)

(4) _____ gene which can introduce in fish responsible for antifreeze protein by microinjection methods.

(a) Winter flounder gene (b) Human gene

(c) Rainbow thout gene (d) All of these

(5) ____ Temperatute should be maintained for preservation of animal cell culture in liduid nitrogen.

(a) -196° C (b) -70°C (c) -80° C (d) -37° C

(6) Pluronic F68 is used as an antifoam agent in animal tissue culture medium. (True/False)

(7) Nunc cell factory system is used for scaling up of ____ (monolayer culture/suspension culture)

(8) Expand HAT.

(9) Define Bioreactor.

(10) _____ is an example of continuous cell line.

(a) MRC-5 (b) Hella (c) IMR-90 (d) All of these

[P.T.O.

Q-2. Attempted any 4 questions. Each question carries 5 marks. 20

(1) Give the defination of organ culture. Describe in detail histotypic culcure.

(2) Discuss in detail Enzyme tissue disaggregation of primary cell culture.

(3) Discuss the following (any one)

(A) Cell line

(B) Serum free media

(C) Application of animal cell culture.

(4) Discuss in detail cryopreservation of animal cell culture.

(6) Write a short note cell cloning.

Q-3. Attempted any one questions. Each question carries 10 mark. 10

(1) Define IVF. Descuss in detail IVF.

(2) Define Hybridoma Technology. Explain in detail monoclonal antibody.

———