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

Internal Examination

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

9-10-2015] **Biotechnology - 504** **[1-30 to 3-00**

Applied Animal Tissue Culture

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

(1) Trypan Blue dye stains the _____ cell. (viable/non viable)

(2) The required range of PH for animal cell culture is _____.

(A) 2.4 - 2.8 (B) 6.2 - 6.6 (C) 7.2 - 7.6 (D) 8.2 - 8.6

(3) _____ is an example of glass microcarrier employed in the culturing of animals cells.

(A) cultiphere-G (B) Rapidcell-G

(C) Rapidcell-C (D) All of these

(4) The culturing of the cells for their reggregation to form a tissue-like 3D structure represents histotypic culture. (True / False)

(5) Write the name of any two established animal cell lines.

(6) All normal animal cells are mortal. (True / False)

(7) _____ cells are pluripotent, that is, they are able to differentiate into all derivatives of the three primary germ layer. ectoderm, endoderm and mesoderm.

(8) Define Vaccine.

(9) Cell Cycle represent the phenomenon of cell _____. (proliferation / differentiation)

(10) Discuss the role of HAT medium in the selection of hybrid cells.

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

(1) Give the defination of cell line and cell Strain. Write difference between finite cell line and continuous cell line.

(2) Discuss in detail any one Primary cell culture Technique for tissue disaggegation.

(3) Discuss the following (any one)

(A) Transgenic mice (B) Transgenic fish

(C) Transgenic sheep.

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

(6) Write a short note on Hybridoma Technology.

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

(1) Define Media. Write a note on the various types of media used for culturing animal cell in vitro.

(2) Define Bioreactor. Explain the various technique of scall up of the animal cell culture in monolayer & suspension culture.
