

M.Sc. (Biotechnology) (CBCS Pattern) Sem-III
PSBIT109 - Animal Biotechnology Paper-I

P. Pages : 1

Time : Three Hours



GUG/W/22/11236

Max. Marks : 80

1. Discuss in details about various equipment's and materials required for animal cell culture technology along with advantages & Limitations. **16**
OR
a) Write in details about various types of culture media used for Animal cell culture. **8**
b) Describe various characteristics of cells in Animal cell culture. **8**
2. What are cell lines? Describe in details about maintenance & management of cell lines. **16**
OR
a) Discuss methods of separation of cell types along with it's limitations. **8**
b) Give a detailed account of primary culture. **8**
3. What is Tissue engineering? Give detailed account of Design & engineering of Tissue & it's modeling. **16**
OR
a) Discuss in details about cell synchronization & cell manipulation. **8**
b) What is Apoptosis? Discuss the role of cytochrome-C in it. **8**
4. Discuss details about how a biologically important product like vaccine can be mass produced using Animal tissue culture. **16**
OR
a) Give a detailed account of manipulation of Reproduction in Animals. **8**
b) Give details about various applications of Animal cell culture. **8**
5. a) Write a note on function of different constituents in culture medium. **4**
b) Give a brief account of three dimensional cultures. **4**
c) Write various applications of embryonic stem cells. **4**
d) Write a note on IVF. **4**
