



Code No. : **8088**

FACULTY OF SCIENCE
B.Sc. III Year Examination, March/April 2012
BIO-TECHNOLOGY (General)
Paper – IV (Applications of Bio-Technology)

Time: 3 Hours]

[Max. Marks : 100

Note : Answer all questions. All questions carry equal marks.

1. a) Write on principles of animal cell culture-culture vessels.

OR

b) Describe in detail on gene transfer techniques.

2. a) Explain the masscultivation of cell cultures and process engineering.

OR

b) -Explain the production of therapeutic proteins from transgenic plants.

3. a) Explain about the role of microorganisms in the production of secondary metabolites.

OR

b) Write on fermentative production of microbial enzymes and antibiotics.

4. a) Explain the production of non-conventional fuels and their impact on environment.

OR

b) What are the microbial treatments used for municipal and industrial effluents ?

5. Write short notes on **any three** of the following :

a) Invitrofertilization.

b) Bombardement.

c) Humangrowth Hormone.

d) Bioremediation.

e) Meristen cultures.