

**LL.M. DEGREE II SEMESTER EXAMINATION, APRIL 2009****SLS 2211 BIOTECHNOLOGY AND IPR**

Time: 3 Hours

Maximum marks : 50

(All questions carry EQUAL marks)

(5x10=50)

I. A. Briefly explain the technique and application of genetic engineering and its importance in biotechnology.

**OR**

B. Elaborate the role of plant tissue culture in agriculture biotechnology.

II. A. What do you understand by genetically modified foods? Discuss the ethical, legal and social implications related to GM food.

**OR**

B. What are the importances of vaccines in health-care? Name the different types of vaccines in use and the importance of biotechnological processes in improving these vaccines.

III. A. Elaborate the importance of bio-pesticides and bio-fertilizers in agriculture biotechnology giving emphasis on its environmental impact.

**OR**

B. Explain the importance of bio-conservation and the various methods used for bio-conservation.

IV. A. Explain with example the bioprocess involved in the large scale production of antibiotic by fermentation process.

**OR**

B. Briefly explain the different secondary metabolites by microorganisms and their industrial production.

V. A. Explain the ethical, legal and social issues related to human genome project.

**OR**

B. Elaborate the intellectual property rights and patent issues related to life forms.