[LD 349] **OCTOBER 2013** **Sub. Code: 2910**

M.PHARM. DEGREE EXAMS

FIRST YEAR

BRANCH III – PHARMACOGNOSY

PAPER IV – PHYTOCHEMISTRY AND BIOTECHNOLOGY

Q.P. Code : 262910

Time : 3 hours **Maximum : 100 marks**

I. Elaborate on : **(2x20=40)**

1. Describe in detail about the fermentation technology with suitable examples. Discuss its applications in pharmaceutical industry.

2. Discuss the laboratory requirements and media used for the plant tissue culture. Explain the secondary product formation by cell suspension culture.

II. Write notes on : **(10x6=60)**

1. Biotransormation.
2. Optical crystallography.
3. Abberant synthesis in higher plants.
4. Traditional methods of extraction.
5. Applications of IR spectroscopy.
6. Secondary metabolites in chemosystematics.
7. Usefulness of genetics on medicinal plants.
8. Vitamin $B_{12.}$
9. Yeast and its uses.
10. General methods of isolation of phytoconstituents.

****