

[LK 349]

MAY 2017

Sub. Code: 910

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH III – PHARMACOGNOSY
PAPER IV – PHYTOCHEMISTRY AND BIOTECHNOLOGY**

Q.P. Code : 262910

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Principle, protocol and applications of cell suspension culture with neat diagrammatic representation.
2. a) Production of Penicillin by fermentation.
b) Single cell proteins.

II. Write notes on:

(10 x 6 = 60)

1. Microbiological conversion, aberrant synthesis in higher plants.
2. Microchemical analysis.
3. Callus culture.
4. Spectral study of the constituents of secondary Phytometabolites.
5. Pharmaceutical effluents – treatment and legal requirements.
6. Secondary metabolites in Chemosystematics.
7. Mutation.
8. Hot continuous extraction method.
9. Extraction of volatile oils.
10. Applications of fermentation technology.
