

[LI 349]

APRIL 2016

Sub. Code: 2910

**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. Pharmaceutical effluents, its treatment and legal requirements in Fermentation Technology.
2. Microbiological conversions and aberrant synthesis in higher plants.

**II. Write notes on:**

**(10 x 6 = 60)**

1. HPTLC and its applications.
2. Supercritical fluid extraction and its applications.
3. Laboratory requirements and general techniques in plant tissue culture.
4. Usefulness of secondary metabolites.
5. Polarising microscope and its applications.
6. Nutritional requirements for plant tissue culture.
7. Application of IR spectroscopy in the identification of Phytoconstituents.
8. Production of single cell proteins.
9. Production of Vitamin B<sub>12</sub> through fermentation.
10. Callus culture and its applications.

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