B. Pharm. 3rd year 2nd semester Examination 2017

Subject: Pharmacognosy I

Time: Three hours Full Marks: 100

(Answer any five taking at least 2 from each group)

Group A

1. Define callus tissue. Describe the process of regeneration of whole plant from callus culture. How do you develop cell suspension culture from callus culture? Describe the general composition of plant tissue culture medium. Define the term 'Totipotency'.

$$2 + 5 + 5 + 6 + 2 = 20$$

- 2. Write explanatory notes on
 - a. Classification and growth pattern in cell suspension culture
 - b. Isolations of terpenes from volatile oils
 - c. Microscopic features of clove

$$(6+3)+4+7=20$$

3. Write down the biological sources, chemical constituents and uses of eucalyptus oil, jalap, mentha oil, Balsam of peru and orange peel.

$$(1+2+1) \times 5 = 20$$

- 4. Write notes on
 - a. Hardening of in vitro regenerated plants
 - b. Advantages of micropropagation
 - c. Types of resins with examples
 - d. Physico-chemical properties of volatile oils
 - e. Chemical tests for turmeric
 - f. Surface sterilization of ex-plants

4+2+4+3+3+4=20

B. PHARMACEUTICAL TECHNOLOGY THIRD YEAR SECOND SEMESTER EXAM 2017

Subject: PHARMACOGNOSY I

Full mark: 100 Time: Three hours

GROUP - B

Answer five questions, taking at least two from each group, all question carry equal mark

5. Define and classify the crude drug with example.

20

5. Write the scheme of pharmacognostic study of crude drug

20

3. Write short notes on:

5x4 = 20

a) Tannin

- b) Carbohydrate
- c) Castor oil
- d) Factor effecting the production of phyto-drugs in medicinal plants