Ref no: Ex/PHARM/T/324/2019

B. Pharmacy Third Year Second Semester Examination 2019

Subject: Pharmacognosy I

Time: 03 Hours

Full Marks: 100

Group A

Answer any five questions, taking at least two from each group, each question carry equal Marks

1. What is crude drug? Classify the crude drugs with suitable examples.

20

- 2. Write in details about the scheme of Pharmacognostic study of the crude drugs. 20
- 3. What is tannin? Write the property, test and classification of tannin.
 - a) Write the source, chemical constituents and uses of Myrobalan, Bahera, Arjuna, Pale and Black catechu.
- 4. Write the importance of starch in Pharmaceutical Sciences.
 - a) How will isolate starch form Potato?
 - b) Write the source, chemical constituents and uses of Isabgol, Honey, Acacia and Tragacanth
 - Mention the factors that influence the production of secondary metabolites in medicinal plants.
- 5. Write the property of fixed oil. How will distinguish fixed oil and volatile oil?
 - a) Write the source, chemical constituents and uses of Castor oil, Arachis oil and Mustard oil.
- b) Write about the insecticides generally used in the field of medicinal and aromatic plants cultivation. What is ideal insecticide?

B. Pharm. 3rd year 2nd semester Examination 2019

Subject: Pharmacognosy I

Time: 3 hours

Full Marks: 100

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

GROUP - B

1. Define and classify plant tissue culture. Describe the method of preparing surface sterilized ex-plants. Explain dedifferentiation and re-differentiation. Write down the applications of plant tissue culture. How will you detect the viability of plant cells? Write down the roles of phytohormones in plant tissue culture. Write down the roles of different complex additives in the in vitro growth of plant tissues.

2+5+2+4+2+3+2=20

- 2. Write explanatory notes on
 - a. Cell suspension culture
 - b. Hardening of in vitro derived plants

10 + 10 = 20

3. What are essential oils? Describe the physic-chemical characteristics of volatile oils. Write down the methods of extraction of volatile oils and comprising terpenes. Write down the biological sources, chemical constituents and uses of Lemon grass oil, Nutmeg, and Dill.

1+4+6+9=20

- 4. Write notes on
 - a. Biosynthesis of terpenoids
 - b. In vitro conservation of plants
 - c. Callus culture

7 + 7 + 6 = 20