

**B PHARM**  
**(SEM IV) THEORY EXAMINATION 2019-20**  
**PHARMACOGNOSY AND PHYTOCHEMISTRY I**

*Time: 3 Hours*

*Total Marks: 75*

**Note: 1.** Attempt all Sections.

**SECTION A**

- 1. Attempt *all* questions in brief. **10 x 2 = 20****
- a. Define explants? Write down common sterilizing reagents for explants.
  - b. Write down the biological source of Cotton and Castor oil?
  - c. Chemical test for flavonoids?
  - d. Elaborate on the merit and demerit of chemical classification of crude drugs.
  - e. Differentiate organized drugs from unorganized drugs.
  - f. Identification test for Alkaloids?
  - g. Functions of Hyaluronidase.
  - h. Define true, proto and pseudo-alkaloids with examples?
  - i. Examples of Natural pesticides with their biological source
  - j. Define hybridization?

**SECTION B**

- 2. Attempt any *two* parts of the following: **2 x 10 = 20****
- a. Define Adulteration? What are the methods involved during the adulterations discussed with suitable examples?
  - b. Why evaluations of crude drugs are necessary? Discuss in detail on Quantitative microscopy of crude drugs as per WHO guidelines?
  - c. Write a note on followings Secondary metabolites
    - I) Saponin glycosides
    - II) Resins and resin combination

## SECTION C

**3. Attempt any *five* parts of the following: 7 x 5 = 35**

- a. Write down the properties of Tannins? Classify and support your answer with their chemical test.
- b. Classify PTC techniques? Write a note on Suspension Culture with a schematic diagram.
- c. A brief account of minerals as a source of drugs. Support your answer with examples.
- d. Enlist factors affecting the cultivation of medicinal plants. Discuss in Detail?
- e. Write a note on the following drugs.
  - I) Gelatin
  - II) Cotton
- f. Enlist various systems of medicine? Explain the Homeopathic System of Medicine in details along with historical developments.
- g. Write a note on any one of the following.
  - I) Natural allergens
  - II) Edible vaccines