Sub Code: RPH736

Paper Id: 150724 Roll No:

B. PHARM
(SEM VII) THEORY EXAMINATION 2019-20
PHARACOGNOSY-IV

Time: 3 Hours *Total Marks: 70*

Note: 1. Attempt all Sections and assume any missing data.

SECTION A

1. Attempt *all* questions in brief. 2 x 7 = 14

(a) Draw the Chemical structure of Sennoside A.
(b) Define Totipotency?
(c) Give the biological source of Strychnine and Reserpine containing crude drugs.
(d) Define explants? Write down common sterilizing reagents for explants.
(e) Precursors for Isoquinoline, Quinoline, Tropane and Indole alkaloids.
(f) Define True alkaloid and Proto-alkaloids with suitable examples.
(g) Write a note on Vitali-morin test.

SECTION B

2. Attempt any *three* of the following: 7 x 3 = 21

(a) Discuss in detail with Pharmacognostic profile along with the cultivation and collection of Opium.
(b) Write down the Complete Pharmacognosy of Ergot with their life cycle in detail.
(c) What is alkaloid? Classify the alkaloids according to chemical structure along with suitable examples.
(d) Define Plant Tissue Culture? Enumerate the application of Plant Tissue Culture in Pharmacognosy.
(e) Write in detail for the quality control of herbal drugs with the help of HPTLC chromatographic fingerprinting techniques.

SECTION C

3. Attempt any *one* part of the following: 7 x 1 = 7

(a) Write a note on Purine alkaloids. Explain in detail with their example.
(b) Write a note on Pharmacokinetic and Pharmacodynamic Herbal Drug Interaction. Explain with examples.

4. Attempt any *one* part of the following: 7 x 1 = 7

(a) Explain Macroscopic, Microscopic and other Pharmacognostic details of Datura leaves.
(b) Write a note herbal bio-enhancer. Explain with examples.

5. Attempt any *one* part of the following: 7 x 1 = 7

(a) Enumerate Production and utilization of Tropane alkaloids. Explain briefly
(b) Write the production and utilization of Qunoline alkaloids.

6. Attempt any *one* part of the following: 7 x 1 = 7

(a) Discuss in detail with examples
I. Imidazole **II.** Isoquinoline
(b) Give a brief account of following moiety and support your answer with example.
I. Quinazoline **II.** Amino alkaloid

7. Attempt any *one* part of the following: 7 x 1 = 7

(a) Classify PTC techniques? Write a note on Suspension Culture with a schematic diagram.
(b) Give an account of Nutritional requirements, growth & maintenance of Plant Tissue Culture.

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