

SUBJECT: PHARMACOGNOSY – III

Day : Friday
Date : 03/05/2019

S-2019-4403

Time: 10.00 A.M. TO 01.00 P.M.
Max. Marks: 60

N. B.:

- 1) **Q. No. 1 and Q. No. 5** are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from each section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-I

- Q.1** Answer any **FIVE** of the following: (10)
- a) Define adulteration.
 - b) What is totipotency?
 - c) Give the different phases of growth curve.
 - d) Give the parameters consider in morphological evaluation of crude drugs.
 - e) What is swelling index?
 - f) What is vein islet number?
- Q.2** Write an exhaustive note on protocol to establish plant cells under *in-vitro* conditions. Give various strategies used for the enhancement of phytopharmaceuticals from plant issue culture. (10)
- Q.3** a) Explain WHO guidelines for the standardization of crude drugs. Give the significance of pesticide residue. (06)
- b) Write a note on culture media and give the role of growth hormones. (04)
- Q.4** Attempt any **TWO** of the following: (10)
- a) Foaming index
 - b) Cell suspension culture
 - c) Chemical evaluation of crude drugs
 - d) Biological evaluation of crude drugs

SECTION-II

- Q.5** Answer any **FIVE** of the following: (10)
- a) Compare maceration and infusion
 - b) Define and differentiate between natural fibers and synthetic fibers with examples.
 - c) Give biological source and chemical constituents of Safed musli.
 - d) Give biological source and chemical constituents of Adulsa.
 - e) Give biological source and chemical constituents of Gokharu.
 - f) What is bentonite?
- Q.6** Write an exhaustive note on extraction. Explain the principle, application and advantages of Super critical fluid extraction. (10)
- Q.7** a) Write the pharmacognostic details, toxicity and marketed formulations of Giloy. (06)
- b) Write a note on guggul. (04)
- Q.8** Attempt any **TWO** of the following: (10)
- a) Soxhlet apparatus
 - b) Amla
 - c) Asbestos
 - d) Chalk