

Day : Monday

Time: 10:00 AM TO 1:00 PM

Date : 30-04-2018

Max. Marks: 60

S-2018-3936

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) Give examples of auxins.
 - b) What is adulteration?
 - c) Define totipotency.
 - d) Give the parameters consider in microscopical evaluation of crude drugs.
 - e) What is Foaming Index?
 - f) Enlist various leaf constants.
- Q.2** Explain the application of plant tissue culture. Give various strategies used for the enhancement of phytopharmaceuticals from plant tissue culture. (10)
- Q.3** a) Describe physical and chemical methods of evaluation of crude drugs and give their advantages and limitations. (06)
- b) Give the salient features of WHO guidelines for the standardization of crude drugs. (04)
- Q.4** Attempt any **TWO** of the following: (10)
- a) Determination of Pesticides residue
 - b) Define and Differentiate between moisture content and loss on drying.
 - c) Morphological evaluation of crude drugs
 - d) Biological evaluation of crude drugs

SECTION-II

- Q.5** Answer any **FIVE** of the following: (10)
- a) What is Percolation?
 - b) Define and differentiate between natural fibers and synthetic fibers with examples.
 - c) Give biological source and chemical constituents of Ashoka.
 - d) Give biological source and chemical constituents of Bramhi.
 - e) Give biological source and chemical constituents of Ashwgandha.
 - f) What is successive extraction?
- Q.6** Write an exhaustive note on extraction. Explain the principle, application and advantages of ultra sound assisted extraction. (10)
- Q.7** a) Write exhaustive note on microwave assisted extraction. (06)
- b) Write the pharmacognostic details, toxicity and marketed formulations of Amla. (04)
- Q.8** Attempt any **TWO** of the following: (10)
- a) Give well labeled diagram of soxhlet apparatus
 - b) Calamine
 - c) Kaolin
 - d) Shatavari