

Day: Tuesday
Date: 16-11-2021

Time: 10:00AM TO 1:00 P.M.
Max. Marks: 75

W-2021-20729

N.B.:

- 1) Question 1 and 5 are **COMPULSORY**. Out of remaining **THREE** questions, solve any **TWO** questions from each section.
- 2) Figure to the right indicate **FULL** marks.
- 3) Answer to both the sections should be written in **SEPARATE** answer books.

SECTION-I

- Q.1** Explain Flash chromatography technique of isolation in detail. (08)
- Q.2** Explain and draw the biosynthetic pathway of Strychnine **OR** Ephedrine. Highlight radio tracer technique. (15)
- Q.3** Add a detailed note on Withanolides with special reference to source, chemical structure, isolation process and industrial application. (15)
- Q.4** Write notes on any **TWO** of the following: (15)
- a) Comment of NCE drug registration
 - b) Explain the role of HPLC in the characterization of herbal extracts
 - c) Post market surveillance

SECTION-II

- Q.5** Explain Microwave assisted extraction technique in detail. (07)
- Q.6** Discuss various phases of Drug discovery from plants. Highlight selection and optimization of lead compounds. (15)
- Q.7** Discuss the structure elucidation of Glycyrrhizin **OR** Caffeine and highlight its spectroscopic details like UV, IR, MS, NMR, (1H, 13C). (15)
- Q.8** Write notes any **TWO** of the following: (15)
- a) Supercritical fluid extraction and its applications
 - b) Comment on selection and optimization of artemesin
 - c) Add a note on preparative HTPLC method for isolation

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