

MASTER OF PHARMACY (M. PHARM.) (CBCS-2019 COURSE)
M.Pharm. Sem-I Pharmacognosy : MARCH : 2022
SUBJECT: PHYTOCHEMISTRY

Day : Wednesday
Date 23-03-2022

M-20729-2022

Time : 10:00 AM-01:00 PM
Max. Marks: 75

N.B.

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

SECTION – I

- Q.1** Give the biosynthetic pathway of Glycosides and explain in detail the isolation method for Sennosides **OR** Bacosides. **(08)**
- Q.2** Discuss various stages of drug discovery process from natural source. **(15)**
- Q.3** Explain structure elucidation of Caffeine **OR** Nicotine with respect to UV, IR, H^1NMR and Mass spectroscopy. **(15)**
- Q.4** Write notes on **ANY TWO** of the following : **(15)**
- a) Criteria for selection of solvents for extraction processes
 - b) Supercritical fluid extraction
 - c) LCMS in Phytochemical finger printing

SECTION – II

- Q.5** Explain in detail the Radio-Tracer technique. **(07)**
- Q.6** Discuss isolation, purification and importance of cinchona alkaloids. **(15)**
- Q.7** Structure elucidation of Carvone **OR** Menthol with respect to UV, IR, H^1NMR and Mass spectroscopy. **(15)**
- Q.8** Write notes on **ANY TWO** of the following : **(15)**
- a) Counter-current extraction technique
 - b) Applications of HPTLC in phytochemical standardization
 - c) Selection and Optimization of lead compounds
