PG (NEW) CBCS M.Sc. Semester-II Examination, 2020 BOTANY PAPER: BOT 203 (PLANT ANATOMY AND PHARMACOGNOSY)

Full Marks: 20

Time: 1 Hour

Answer any <u>ONE</u> question from each unit

UNIT-I (PLANT ANATOMY)

10 MARKS

- 1. Describe the ultrastructure of plant cell wall.
- 2. Mention different types of nodal anatomy found in Dicotyledonous plants.
- 3. Write down characteristics and utilities of salt gland and nectaries in plants.
- 4. Describe the different types of stomata according to Metchalfe and Chalk.
- 5. Describe the various types of laticifers found in plants and mention their significance.

UNIT-II (PHARMACOGNOSY)

10 MARKS

- 1. Briefly describe the Shikimic acid pathway in plants. Mention its importance.
- 2. Write schematically the biosynthetic pathway of Terpenoids. Give examples of some Terpenoids having pharmaceutical applications.
- 3. Write notes on "classification of crude drug". Mention two active principles of Digitalis.
- 4. Describe the organoleptic, micro morphological and chemical characteristics of *Rauvolfia*. Mention its application in human health.
- 5. What are secondary metabolites? Mention different types of secondary metabolites found in plants and give their significance.
