

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm – SEMESTER-V – EXAMINATION – SUMMER -2021

Subject Code: BP503TP

Date:05/08/2021

Subject Name: Pharmacognosy & Phytochemistry II

Time: 02:30PM to 05:30PM

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Enumerate basic metabolic pathways and write in brief the formation of aromatic amino acids. **06**
- (b) Write the chemical test for identification of indole alkaloid. Write a note on chemical constituents and uses of Rauwolfia. **05**
- (c) How is industrial production of podophyllotoxin carried out? Write utilization of podophyllotoxin. **05**
- Q.2** (a) Which method is used for analysis of quinine? Explain the same in details. **06**
- (b) Enlist method of extraction. Explain continuous extraction method with diagram. **05**
- (c) Write the methods by which radioactive isotopes are used in study of biogenetic studies. **05**
- Q.3** (a) Write the biological source, chemical composition and therapeutic uses of guggul. **06**
- (b) Which are the methods used for estimation of digoxin? Explain in detail. **05**
- (c) Classify chromatographic techniques used for isolation. Write in brief about any one technique. **05**
- Q.4** (a) Give a detailed note on industrial production of vincristine and vinblastine. **06**
- (b) Write a note on electrophoresis used for isolation, purification and identification of crude drugs. **05**
- (c) What are iridoids? Write the biological sources and chemical constituents of gentian. **05**
- Q.5** (a) Write a detailed note on UV – Spectroscopic method for identification of phytoconstituents. **06**
- (b) How is menthol isolated? Write a detailed note on it. **05**
- (c) Write a note on chemical constituents of licorice. **05**
- Q. 6** (a) Give a detailed account of method of estimation of taxol and write its uses. **06**
- (b) What are resins? Write the isolation of curcumin. **05**
- (c) Give a list of secondary metabolites synthesized through acetate pathway. Write the pathway of any one. **05**
- Q.7** (a) How are radioactive isotopes fed to the plants for the study of biogenetic pathways? **06**
- (b) Write a note on biological source, chemical constituents and uses of clove. **05**
- (c) Write the estimation and uses of atropine. **05**