

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 5 EXAMINATION – WINTER -2024

Subject Code:BP503TP**Date: 25-11-2024****Subject Name: Pharmacognosy and Phytochemistry II****Time:10.30 AM TO 01.30 PM****Total Marks: 80****Instructions:**

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

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| Q.1 | (a) Explain in detail Shikimic acid pathway. | 06 |
| | (b) Write a note on tracer techniques for investigation of biogenetic pathways. | 05 |
| | (c) Discuss in detail about pathway for biosynthesis of lipids in plants | 05 |
| Q.2 | (a) Write down isolation, identification and analysis of citral. | 06 |
| | (b) Write a note on industrial production and estimation of atropine. | 05 |
| | (c) Write down source, chemical constituents and uses of Ginger and Asafoetida. | 05 |
| Q.3 | (a) Write down isolation, identification and analysis of rutin. | 06 |
| | (b) Write down source, chemical constituents and uses of Senna and Dioscorea. | 05 |
| | (c) Write down pharmacognosy of drug used as carminative. | 05 |
| Q.4 | (a) Write a note on industrial production, estimation and utilization of digoxin. | 06 |
| | (b) Write down isolation, identification and analysis of quinine. | 05 |
| | (c) Define Alkaloids. Classify it with suitable examples in detail. | 05 |
| Q.5 | (a) Define Extraction. Enlist different modern methods of extraction and explain supercritical fluid extraction in detail. | 06 |
| | (b) Define Glycosides. Write a note on drug used as cardiogenic. | 05 |
| | (c) Write a note on drug used as antineoplastic agent. | 05 |
| Q. 6 | (a) Write a note on industrial production, estimation and utilization of artemisin. | 06 |
| | (b) Write down isolation, identification and analysis of podophyllotoxin. | 05 |
| | (c) Write the application of latest spectroscopic techniques in phytochemistry. | 05 |
| Q.7 | (a) Write in detail about acetate mevalonate pathway. | 06 |
| | (b) Write a note on industrial production and estimation of taxol. | 05 |
| | (c) Write a note on electrophoresis used for isolation, purification and identification of crude drugs. | 05 |
