

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. SEMESTER -V• EXAMINATION –WINTER-2022

Subject Code: BP503TP**Date:30/12/2022****Subject Name: Pharmacognosy and phytochemistry II****Time: 10:30am to 01:30pm****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 Shikimic acid pathway with chemistry. | 06 |
| | (b) | Write in detail about acetate mevalonate pathway. | 05 |
| | (c) | Define and classify Alkaloids. Explain the chemical classification of alkaloids with suitable examples. | 05 |
| Q.2 | (a) | Differentiate between Pale catechu and Black catechu. | 06 |
| | (b) | Discuss in detail about pathway for biosynthesis of lipids in plants. | 05 |
| | (c) | Write different methods of tracer techniques in the investigation of Biogenetic studies. | 05 |
| Q.3 | (a) | Describe Isolation, Identification and Analysis of menthol. | 06 |
| | (b) | Define extraction. Explain different modern methods of extraction in brief. | 05 |
| | (c) | Give method for isolation and estimation of Forskolin. | 05 |
| Q.4 | (a) | Give exhaustive note on cardiac glycoside. | 06 |
| | (b) | Write a note on production and estimation of Sennosides. | 05 |
| | (c) | Give significance of HPTLC in isolation, purification and identification of crude drugs. | 05 |
| Q.5 | (a) | Write method for isolation of citral and Rutin. | 06 |
| | (b) | Describe a suitable method for production and estimation of Diosgenin. | 05 |
| | (c) | Discuss significance of Electrophoresis in the isolation and purification of phytoconstituents. | 05 |
| Q. 6 | (a) | Define and classify glycoside. Write source, chemical constituents and uses of Aloes. | 06 |
| | (b) | Write source, chemical constituents and uses of Bezoin and Ginger. | 05 |
| | (c) | Give source, chemical constituents and uses of Vinca and Opium. | 05 |
| Q.7 | (a) | Give the source, isolation and identification method of Glycyrrhetic acid. | 06 |
| | (b) | Write the biological source, isolation and estimation method of Podophyllotoxin. | 05 |
| | (c) | Write note on pharmacognosy of Myrrh. | 05 |

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