

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm- SEMESTER-5 EXAMINATION-WINTER-2024

Subject Code:2250006**Date: 21/11/2024****Subject Name: Pharmacognosy-III****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) | Define and classify glycoside with example. Discuss its pharmacological properties in detail. | 06 |
| | (b) | Write a note on Indian Senna. | 05 |
| | (c) | What are the different sources of Aloe? Explain their method of preparation of Curacao aloe with uses. | 05 |
| Q.2 | (a) | Define Cardiac glycoside. Write a note on Strophanthus. | 06 |
| | (b) | Write a note on saponin glycoside. | 05 |
| | (c) | Write down Biological sources, chemical constituents and uses of Brahmi. | 05 |
| Q.3 | (a) | Explain following chemical tests:(i) Modified Borntrager's test (ii) Shinoda test (iii) Keller-killiani test | 06 |
| | (b) | Discuss pharmacognosy of Digitalis. | 05 |
| | (c) | Differentiate between cardenolide and bufadienolides and give examples. | 05 |
| Q.4 | (a) | Explain Plant Tissue culture. Explain its application in Pharmacy. | 06 |
| | (b) | Explain cell suspension culture in detail. | 05 |
| | (c) | Discuss in detail composition of nutrient media in Plant Tissue Culture technique. | 05 |
| Q.5 | (a) | Write a note on protoplast culture and Hairy root culture. | 06 |
| | (b) | What are cyanogenetic glycosides? Write Biological Source, Chemical constituents and uses of Almond and Linseed. | 05 |
| | (c) | Write the Pharmacognosy of Antidiabetic drug included in your syllabus. | 05 |
| Q. 6 | (a) | Define Bitter Glycoside. Compare Morphology, Microscopy and uses of chirata stem and Kalmegh stem. | 06 |
| | (b) | Write Biological source, chemical constituents, substitutes, diagnostic microscopic feature of Nerium. | 05 |
| | (c) | Draw a well labeled Microscopic diagram of Liquorice. | 05 |
| Q.7 | (a) | Write Biological source, uses, chemical constituents, Morphological and Microscopical characteristics of Arjun. | 06 |
| | (b) | Write a note on Psoralea and Bhangro. | 05 |
| | (c) | Give active constituents and Therapeutic uses of Gymnema and Methi. | 05 |
