

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 5 EXAMINATION – SUMMER -2019

Subject Code: 2250006

Date: 10-06-2019

Subject Name: Pharmacognosy-III

Time: 02:30 PM TO 05:30 PM

Total Marks: 80

Instructions:

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

- | | | |
|-------------|---|-----------|
| Q.1 | (a) Explain principle of plant tissue culture and discuss its application. | 06 |
| | (b) Draw well labeled microscopical diagram of Liquorice. | 05 |
| | (c) Write in detail methods of preparation of an unorganized drug containing anthraquinone glycoside. | 05 |
| Q.2 | (a) Explain following chemical tests: (i) Modified Borntrager's test (ii) Grignard's test (iii) Shinoda test. | 06 |
| | (b) Write pharmacognosy of man root. | 05 |
| | (c) Explain detailed histology of Satavari. | 05 |
| Q.3 | (a) Give the difference between following drugs.
1. Jal Brahmi and Mandukparni
2. Chhota Gokhru and Bada Gokhru | 06 |
| | (b) Write short note on isothiocyanate glycosides. | 05 |
| | (c) Discuss pharmacognosy of Digitalis. | 05 |
| Q.4 | (a) Explain in detail saponin glycoside containing antidiabetic drugs. | 06 |
| | (b) Define coumarins. Write biological source, morphological characteristic, chemical constituents and uses of Linseed. | 05 |
| | (c) Write pharmacognosy of Butea. | 05 |
| Q.5 | (a) Explain in detail chemistry of cardiac glycoside and write its chemical test. | 06 |
| | (b) Differentiate following:
1. Lal Karen and Pili Karen
2. Alexandrian senna and Tinnevelly senna | 05 |
| | (c) Draw well labeled microscopical diagram of chirata. | 05 |
| Q. 6 | (a) Explain in detail nutritional requirement of plant tissue culture. | 06 |
| | (b) Enumerate bitter glycoside containing drugs and explain anyone in detail. | 05 |
| | (c) Write a note on protoplast culture. | 05 |
| Q.7 | (a) Define Glycoside, explain its physicochemical properties and classify them with appropriate examples. | 06 |
| | (b) Write biological source, chemical constituents and uses of Psoralea and Bhangro. | 05 |
| | (c) Define plant tissue culture. Discuss laboratory requirement for plant tissue culture. | 05 |
