

Seat No.: _____

Enrolment No. _____

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. **06**
1. Jal Brahmi and Mandukparni
2. Chhota Gokhru and Bada Gokhru
(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: **05**
1. Lal Karen and Pili Karen
2. Alexandrian senna and Tinnevelly senna
(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**
