

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 5 EXAMINATION – SUMMER -2020**Subject Code: 2250006****Date:02-11-2020****Subject Name: Pharmacognosy-III****Time: 2:30 PM TO 5:30 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) Define Glycoside. Discuss its classification and physico chemical properties in details. **06**
- (b) Write down Reduced derivatives of Anthraquinone glycoside. Discuss mechanism of action of it. **05**
- (c) Write down detail Pharmacognosy of Senna. **05**
- Q.2** (a) Define saponins. Differentiate steroidal saponin and triterpenoidal saponin with examples. **06**
- (b) Give biological source, chemical constituents, uses of Galactagogue drug. **05**
- (c) Write down biological source, chemical constituents, uses of Liquorice. **05**
- Q.3** (a) Describe following chemical tests : **06**
- 1.Keller killiani test
- 2.Grignard test
- 3.Modified borntrager test
- (b) Comment on following: **05**
1. Cascara bark is to be stored for one year before use.
2. Digitalis should be dried immediately after collection.
- (c) Draw and explain detailed transverse section of Linseed. **05**
- Q.4** (a) Differentiate following: **06**
1. Indian Rhubarb and Chinese Rhubarb
2. Kalmegh and chirata
3. Cardenolide and Bufadienolide
- (b) Write down phamacognosy of foxglove leaves **05**
- (c) Give biological source, chemical constituent, uses of isothiocyanate glycoside containing drug. **05**
- Q.5** (a) Define plant tissue culture. Discuss application of it in details. **06**
- (b) Explain suspension culture in details. **05**
- (c) Write a note on Plant cell Immobilization. **05**
- Q. 6** (a) Write a short note on Protoplast culture and Hairy root culture. **06**
- (b) Explain Elicitation in details. **05**
- (c) Write a note on Cryopreservation. **05**
- Q.7** (a) Give biological source, chemical constituent, uses of Dioscorea and Quassia. **06**
- (b) Write down phamacognosy of Aloe. **05**
- (c) Write detail phamacognosy of memory enhancer drug. **05**