

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER – 5- EXAMINATION –WINTER - 2018

Subject Code:2250006**Date: 03/12/2018****Subject Name: Pharmacognosy-III****Time:10:30 AM TO 01:30 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 with appropriate examples. How glycoside can be isolated? **06**
- (b) What do you mean by saponins? Discuss in details about properties and chemistry of saponins. **05**
- (c) Write down complete pharmacognosy of one adaptogenic drug. **05**
- Q.2** (a) Enlist saponins containing drugs included in your syllabus. Write detailed note on Satavari. **06**
- (b) Discuss the different sources of Liquorice with its morphology, chemical constituents and pharmacological actions. **05**
- (c) Write the Pharmacognosy of brain tonic drugs included in your Syllabus. **05**
- Q.3** (a) Define cardiac glycosides. Write a detail note on Digitalis. **06**
- (b) Give the difference between Cardenolide & bufadienolide. Write note any one bufadienolide containing drug. **05**
- (c) Differentiate between *Strophanthus kombe* and *Strophanthus gratus*. **05**
- Q.4** (a) Explain chemical tests for followings: (Any Three) **06**
(i) Digitoxose (ii) Sterols (iii) Aloe-emodin (iv) Hydrocyanic acid
- (b) Discuss the distinguishing Morphological, Microscopical & chemical feature of different varieties of Senna. **05**
- (c) What are different sources of Aloe? Explain their morphology & method of preparation. **05**
- Q.5** (a) Define plant tissue culture. Discuss its applications, advantages and disadvantages. **06**
- (b) Discuss in detail composition of nutrient media in plant tissue culture technique. **05**
- (c) Explain various type of cultures used in Plant tissue culture technique with its uses. **05**
- Q. 6** (a) Define bitter glycosides. Compare the morphology, microscopy and uses of Chirata stem and Kalmegh stem. **06**
- (b) Write B.S., Family, Chemical constituents and uses of Gentian and Black Mustard. **05**
- (c) Draw and discuss the ideal design of Plant tissue culture Lab with basic facility. **05**
- Q.7** (a) Write down Biological source, morphology, chemical constituents and uses of Linseed and Palash. **06**
- (b) Write a note on Psoralea and Bhangro. **05**
- (c) Explain the pharmacognosy of drug known as Indian Madder. **05**
