

**GUJARAT TECHNOLOGICAL UNIVERSITY****B.PHARM – SEMESTER – V • EXAMINATION – WINTER – 2015****Subject Code: 2250006****Date: 21/12/2015****Subject Name: Pharmacognosy - III****Time: 10.30 AM to 1.30 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 plant tissue culture. Discuss it's applications. **06**  
(b) Enumerate and discuss requirements of nutrient media in plant tissue culture technique. **05**  
(c) Give pharmacognostic note on Kesudo. **05**
- Q.2** (a) What are different sources of Aloe? Explain their method of preparation. **06**  
(b) Give Sill's classification of glycosides citing suitable examples. **05**  
(c) Differentiate between (i) Chota gokhru and Bada gokhru (ii) Jalbrahmi and Madukparni. **05**
- Q.3** (a) Explain following chemical tests: (i) Modified Borntrager's test (ii) Grignard's test (iii) Libermann's test. **06**  
(b) Write pharmacognostic note on *Ginseng*. **05**  
(c) Draw a well labeled morphological and microscopical diagram (T.S.) of linseed. **05**
- Q.4** (a) Define cardiac glycosides. Write a detail pharmacognosy of purple foxglove. **06**  
(b) Differentiate between cardienolides and bufadienolides. **05**  
(c) Describe complete pharmacognosy of *Gymnema*. **05**
- Q.5** (a) Enlist saponins containing drugs included in your syllabus. Write notes on Satavari. **06**  
(b) Give detail note on pharmacognosy on Senna **05**  
(c) Comment on the following statements (i) *Cassia fistula* is used as mild laxative in infants. (ii) *Cascara* bark is used after one year of it's storage. (iii) Senna pods are preferred for isolation of sennosides. **05**
- Q. 6** (a) Write common name, biological source, family, chemical constituents and uses of Liqurice. **06**  
(b) Discuss pharmacognosy of *Picrorrhiza*. **05**  
(c) Differentiate between Chinese rhubarb and Indian rhubarb. **05**
- Q.7** (a) Discuss hairy root culture and protoplast culture. **06**  
(b) Write a note on coumarin glycosides **05**  
(c) Differentiate between *Strophanthus kombe* and *Strophanthus gratus*. **05**

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