

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – V • EXAMINATION – WINTER • 2016

Subject Code: 2250006

Date: 03-12-2016

Subject Name: Pharmacognosy - III

Time: 10:30 am - 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 & classify the glycosides with example with pharmacological properties. **06**
- (b) What are different sources of Aloe? Explain their method of preparation of Curacao aloe with uses. **05**
- (c) Write the chemistry of anthraquinone glycoside along with identification test. **05**
- Q.2** (a) Define cardiac glycosides. Write a detail pharmacognosy of purple foxglove. **06**
- (b) Differentiate between cardienolides and bufadienolides. **05**
- (c) Give Biological source, family, active constituents, properties and uses of Shatavari and Rhubarb. **05**
- Q.3** (a) **Explain following chemical tests: (Any Three)** **06**
 (i) Modified Borntrager's test (ii) Grignard's test
 (iii) Libermann's & Buchards test. (iv) Keller –killiani test.
- (b) Write a note on coumarin glycosides with Pharmacognosy of drugs known as Bhangaro. **05**
- (c) Write common name, biological source, Variety, family, chemical constituents and Pharmaceutical uses of Liquorice. **05**
- Q.4** (a) Define plant tissue culture. Discuss it's applications in Pharmacy. **06**
- (b) Draw the Ideal Design of PTC lab with Basic facility in Plant tissue culture Laboratory. **05**
- (c) Explain various type of culture used in Plant tissue culture with purpose & use **05**
- Q.5** (a) Write the difference between (i) Indian Squill and European squill **06**
 (ii) Alexandrian Senna and Indian Senna
- (b) Define following term (i) Callus tissue (ii) Totipotency (iii) Explant (iv) Organogenesis (V) Cloning and clone. **05**
- (c) Discuss Media preparation techniques & sterilization techniques used in PTC Laboratory **05**
- Q. 6** (a) Justify Following statement **06**
 1. Bitter compound taken before meal.
 2. Aloe give modified Borntragers test while seena give Borntrager's test
 3. "Cascara bark is stored atleast one year before use"
- (b) Write on Cyanogenic glycosides with Pharmaconosy of Linseed. **05**
- (c) Write the growth Principle in plant tissue culture with various steps for regeneration of plant from Expalnt. **05**
- Q.7** (a) Write a note on Saponin glycosides with pharmacognosy of Ginseng along with marketed formulation which containing Ginseng. **06**
- (b) Write the Pharmacognosy of antidiabetic drug included in your Syllabus. **05**
- (c) Write note Isothiocynate glycoside with different between Black & White mustard. **05**
