

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**
