

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

Subject Code: 260006**Date: 26-10-2016****Subject Name: Pharmacognosy – V (Plant Bio Technology)****Time: 02:30 pm - 05:30 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) Illustrate the important microscopic feature of Galo stem and add a note on its market formulation. **06**
(b) Write biological source, family, morphology, chemical constituents and marketed formulation of Kalijiri fruit. **05**
(c) Explain chemistry and Biogenesis of Abietic acid. **05**
- Q.2** (a) Describe microscopic characteristic of Chitrak root and draw its well labeled diagram of transverse section along with its main active chemical constituents and uses. **06**
(b) Write detail Pharmacognosy of drug used as hepatoprotective. **05**
(c) Write detail note on PUFA (poly unsaturated fatty acids). **05**
- Q.3** (a) Describe a cardiogenic leaf drug described in traditional text and included in your syllabus. **06**
(b) Explain chemistry and Biogenesis of β -amyrin. **05**
(c) Write in short about Dhatakpushpa. **05**
- Q.4** (a) Explain preparation and sterilization of explants in Plant Tissue culture. **06**
(b) Draw and describe T. S. Arjuna bark along with its chemical constituents. **05**
(c) Write biological source, family, morphology, chemical constituents, uses and marketed formulation Malkangni seed. **05**
- Q.5** (a) Write chemistry, biogenesis and pharmacological activity of Vitamin A. **06**
(b) Write biological source, family, morphology, chemical constituents, uses and marketed formulation Apamarg. **05**
(c) Write a short note on Protoplast culture. **05**
- Q.6** (a) Explain chemistry, biogenesis and pharmacological activity Carvone and menthone. **06**
(b) Write biological source, family, morphology, chemical constituents, pharmacology and marketed formulation Shatavari. **05**
(c) Discuss in detail about biotransformation by Plant Tissue culture with examples **05**
- Q.7** (a) What is antioxidant? Write in brief about any two naturally occurring antioxidant plant drugs. **06**
(b) Write short note on shilajit. **05**
(c) Define Plant Tissue culture. Describe nutritive requirement of it. **05**
