



Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY**B.PHARM - SEMESTER- 6 EXAMINATION – SUMMER -2019****Subject Code: 260006****Date: 18-05-2019****Subject Name: Pharmacognosy - V(Plant Bio Technology)****Time: 02:30 PM TO 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) Define Plant tissue culture. Describe general technique and nutrient requirement of it. **06**
(b) What is cryopreservation? Discuss its advantages. **05**
(c) What are antioxidants? Discuss antioxidants of natural origin. **05**
- Q.2** (a) Define Terpenoids. Write classification, occurrence and properties of them. **06**
(b) Explain Acetate-mevalonate pathway with detailed chemistry. **05**
(c) Give the Chemistry and pharmacological activity of Vitamin-A. **05**
- Q.3** (a) Explain terms Prebiotics and Probiotics illustrating suitable examples. **06**
(b) Write a note on nutraceuticals. **05**
(c) Write short note on unorganized drug from your syllabus. **05**
- Q.4** (a) Write Chemical structure, therapeutic & pharmacological activity of (i) Carvone (ii) Pinene (iii) Menthone **06**
(b) Write detailed notes on PUFA (Poly Unsaturated Fatty Acids). **05**
(c) Write biogenesis and chemistry and Pharmacological activity of Geraniol. **05**
- Q.5** (a) Give application of Plant Tissue Culture for production of secondary plant metabolites with examples. **06**
(b) What is protoplast? Discuss methods of protoplast fusion. **05**
(c) Explain: Plant cell immobilization. **05**
- Q. 6** (a) Draw the labeled diagram of microscopy of Satavari root. **06**
(b) Describe a memory enhancer drug described in traditional text & included in your syllabus. **05**
(c) Name the flowers used in preparation of arishta and asava. Give biological source, chemical constituents and uses of it. **05**
- Q.7** (a) Give the vernacular name, B.S, C.C with structure and common use of the following drug. (i) Apamarg (ii) kalijiri (iii) Methi **06**
(b) Describe B.S, Family, Chemical Constituents and uses of following: **05**
1. Galo 2. Adusa
(c) Discuss at length Drug Bhringraj. **05**

