

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.

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|-------------|-----|---|-----------|
| 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:
1. Galo 2. Adusa | 05 |
| | (c) | Discuss at length Drug Bhringraj. | 05 |
