

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM.-SEMESTER-VI- EXAMINATION –SUMMER-2017**

**Subject code: 260006**

**Date: 10/05/2017**

**Subject Name: Pharmacognosy-V (plant bio technology)**

**Time: 10:30 AM to 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.**

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|-------------|--|-----------|
| <b>Q.1</b>  | (a) Define plant tissue culture. Describe general technique and application of it. | <b>06</b> |
|             | (b) Discuss Micro & Macronutrients requirements of plant cells in culture medium.  | <b>05</b> |
|             | (c) How the callus tissue is formed? Write significance of it.                     | <b>05</b> |
| <b>Q.2</b>  | (a) Classify terpenoids with their chemical structure.                             | <b>06</b> |
|             | (b) Write chemistry, biogenesis and Pharmacological activity of Geraniol.          | <b>05</b> |
|             | (c) What is isoprene rule? Describe terpenoidal pathway.                           | <b>05</b> |
| <b>Q.3</b>  | (a) Write common uses and marketed formulations of Chakramadu and Galo.            | <b>06</b> |
|             | (b) Write chemical constituents and traditional uses of Adusi in detail.           | <b>05</b> |
|             | (c) Write geographical source, chemical constituents and formulations of Apamarga. | <b>05</b> |
| <b>Q.4</b>  | (a) What is terpenoid? Describe properties and any one isolation method in detail. | <b>06</b> |
|             | (b) Write biogenesis of Pinene and Vitamin – A                                     | <b>05</b> |
|             | (c) Describe Wagner Meerwein rearrangement and Mannich reaction.                   | <b>05</b> |
| <b>Q.5</b>  | (a) Describe naturally occurring antioxidants and its mechanism of action.         | <b>06</b> |
|             | (b) Write in brief Methi used as health food.                                      | <b>05</b> |
|             | (c) Describe in brief Phytopharmaceuticals and Nutraceuticals.                     | <b>05</b> |
| <b>Q. 6</b> | (a) Write production and purification of shilajit.                                 | <b>06</b> |
|             | (b) Draw and describe well labeled T.S. of Karen leaf.                             | <b>05</b> |
|             | (c) Describe Pharmacognostic study of shatavari.                                   | <b>05</b> |
| <b>Q. 7</b> | (a) Describe a memory enhancer drug described in traditional text.                 | <b>06</b> |
|             | (b) Write morphology of Kalijiri and Dhatakipushpa.                                | <b>05</b> |
|             | (c) Write pharmacognostic note on Dhamaso.   | <b>05</b> |

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