

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Pharm - SEMESTER-VI • EXAMINATION – WINTER 2017**

**Subject Code: 260006**

**Date: 17-11-2017**

**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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|-------------|--|-----------|
| <b>Q.1</b>  | (a) Define plant tissue culture and explain suspension culture and its application.                        | <b>06</b> |
|             | (b) Explain protoplast fusion for plant tissue culture.  | <b>05</b> |
|             | (c) Write a note on micro-propagation.   | <b>05</b> |
| <b>Q.2</b>  | (a) Describe culture medium and its importance in plant growth.  | <b>06</b> |
|             | (b) Discuss anther and pollen culture with suitable examples.  | <b>05</b> |
|             | (c) Describe laboratory requirement for plant tissue culture laboratory.                                   | <b>05</b> |
| <b>Q.3</b>  | (a) Discuss complete pharmacognosy of Karen.   | <b>06</b> |
|             | (b) Write a detailed note on Shatavari   | <b>05</b> |
|             | (c) Describe the microscopy of a traditional drug having anomalous vascular bundles.                       | <b>05</b> |
| <b>Q.4</b>  | (a) Write short note on Herb as a health food. Discuss suitable drugs examples used as health food.        | <b>06</b> |
|             | (b) Write botanical name, family, part used, chemical constituents and uses of Galo.                       | <b>05</b> |
|             | (c) Write common name, biological source, chemical constituents, uses and marketed formulation of chitrak. | <b>05</b> |
| <b>Q.5</b>  | (a) Write a note on drug having steroidal saponins.  | <b>06</b> |
|             | (b) Write a note on a drug used as a brain and nervine tonic.  | <b>05</b> |
|             | (c) Enlist anthelmintic drugs. Describe the drug used in ring worm infection.                              | <b>05</b> |
| <b>Q. 6</b> | (a) Describe schematically biosynthetic route of Mevalonate pathway to Isopentenyl diphosphate.            | <b>06</b> |
|             | (b) Define and classify terpenoids with suitable examples and chemical structure.                          | <b>05</b> |
|             | (c) Write biogenesis of Geraniol or $\beta$ – amyrin with chemical structure.                              | <b>05</b> |
| <b>Q.7</b>  | (a) Describe the biogenesis of carvone in detail.  | <b>06</b> |
|             | (b) Describe the chemistry of vitamin A.   | <b>05</b> |
|             | (c) Write a note on bicyclic monoterpenoids.   | <b>05</b> |

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