

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – VI • EXAMINATION – WINTER • 2015

Subject Code: 260006

Date: 08-01-2016

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.

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|-------------|---|-----------|
| Q.1 | (a) Define plant Tissue culture. Discuss in brief about the Micro and Macronutrients requirements of plant cells in culture medium. | 06 |
| | (b) What is Callus Tissue? Write the significance of Callus culture. | 05 |
| | (c) What are Artificial seeds? Write the importance of Artificial seeds. | 05 |
| Q.2 | (a) Discuss in detail about Amla. | 06 |
| | (b) Give the common name, botanical source, main chemical constituents and uses of:
(I) Methi (II) Satavari | 05 |
| | (c) Write a note on Dhataki. | 05 |
| Q.3 | (a) Define Terpenoids. Classify Terpenoids citing suitable examples. | 06 |
| | (b) Write short notes on Vitamine-A. | 05 |
| | (c) Write chemistry and biogenesis of Pinene. | 05 |
| Q.4 | (a) Write about Antioxidants and Dietary fibres with their Biological role. | 06 |
| | (b) Write in detail on PUFA(Poly Unsaturated Fatty acids). | 05 |
| | (c) Explain Prebiotics and Probiotics illustrating suitable examples. | 05 |
| Q.5 | (a) Discuss in detail about Cell suspension culture. | 06 |
| | (b) Write a short note on Somatic hybridization. | 05 |
| | (c) Discuss in brief about the requirements to establish a Plant tissue culture laboratory. | 05 |
| Q. 6 | (a) Give biological source, morphology and pharmacological uses of
(I) Dhamaso (II) Karen | 06 |
| | (b) Illustrate the important microscopic features of Arjuna bark and add a note on its marketed formulations. | 05 |
| | (c) Write brief notes on Malkangni. | 05 |
| Q.7 | (a) Explain biogenesis and pharmacological activity of Geraniol. | 06 |
| | (b) Discuss the health benefits of Royal jelly. | 05 |
| | (c) Write in brief about Phytopharmaceuticals and Nutraceuticals. | 05 |
