

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 3 EXAMINATION – SUMMER -2019

Subject Code: BP305TP**Date: 07-06-2019****Subject Name: Pharmacognosy and Phytochemistry I****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 Pharmacognosy. Discuss its scope and development in brief. | 06 |
| | (b) “Physicochemical evaluation is extremely important for quality control of crude drugs”. - Justify. | 05 |
| | (c) Discuss the sexual and asexual methods of vegetative propagation in brief. | 05 |
| Q.2 | (a) What is evaluation of the crude drugs? Explain quantitative microscopic evaluation of the crude drugs. | 06 |
| | (b) How can you classify the crude drugs? Give a short note on Chemical and Taxonomical type of classification. | 05 |
| | (c) Define adulteration of crude drug? Discuss unintentional adulteration of crude drugs. | 05 |
| Q.3 | (a) Explain -“Plant tissue culture is fundamental concept of Pharmacognosy”. | 06 |
| | (b) Enlist various plant tissue culture techniques. Discuss Micropropagation and somatic hybridization in very brief. | 05 |
| | (c) Give a note on composition of nutrient media in plant tissue culture. | 05 |
| Q.4 | (a) Elaborate the fundamental principles of Homeopathic system of medicine. | 06 |
| | (b) Discuss the <i>Tridoshas</i> as basic principles of Ayurvedic system of medicine. | 05 |
| | (c) Discuss plant hormones and their applications in plant growth and development. | 05 |
| Q.5 | (a) Define secondary metabolite? Give classification, properties and identification tests of Alkaloids. | 06 |
| | (b) Classify Glycosides as secondary metabolites. Write any two qualitative phytochemical tests of them. | 05 |
| | (c) Write the following chemical tests:
(i) Gold beater’s skin test (ii) Modified Borntrager’s test (iii) Match stick test | 05 |
| Q.6 | (a) Define pharmaceutical aids. Discuss Gelatin and Papain as pharmaceutical aids in brief. | 06 |
| | (b) Write biological source, chemical constituents and uses of the following:
(i) Agar (ii) Tragacanth (iii) Guar gum | 05 |
| | (c) Write a note on Natural allergens. | 05 |
| Q.7 | (a) Give a brief report on factors affecting cultivation of medicinal plants. | 06 |
| | (b) Write biological source, chemical constituents and identification tests of Castor oil and Bees wax. | 05 |
| | (c) Describe the novel medicinal agents obtained from marine sources. | 05 |