

Seat No.: _____

Enrolment No. _____

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.

- 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 *Tridoshas* 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: **05**
(i) Gold beater's skin test (ii) Modified Borntrager's test (iii) Match stick test
- 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: **05**
(i) Agar (ii) Tragacanth (iii) Guar gum
(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**
