

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharmacy Sem-II examination June 2009

Subject code: 220005

Subject Name: Pharmacognosy - I

Date: 12/06/2009

Time: 11:30am-2:30pm

**Instructions:**

**Total Marks: 80**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is a crude drug? What are the methods of classification of crude drugs? Describe therapeutic classification of crude drugs. **06**
- (b) What is Pharmacognosy? Describe its history and scope for future drug development. **05**
- (c) How tissue culture is being utilized as a source of herbal drugs and natural products? **05**
- Q.2** (a) What are the morphological and histological features of monocot and dicot leaves? **06**
- (b) Write general morphological and microscopic characters of seeds and barks **05**
- (c) Why do stems and roots undergo modifications? Write a note on underground Stem modifications. **05**
- Q.3** (a) Write a note on phyllotaxy and venation. Describe different types of leaf margins **06**
- (b) What is an inflorescence? What are different types of racemose inflorescence? **05**
- (c) What is a fruit? Write a note on types of fruits **05**
- Q.4** (a) What are the factors affecting the cultivation, collection and processing of crude drugs? **06**
- (b) What are plant growth regulators? How do they influence the growth of plants? **05**
- (c) Describe the terms polyploidy and hybridization and explain their role in cultivation of medicinal plants **05**
- Q.5** (a) What is adulteration of crude drugs? How do you detect adulteration by organoleptic and microscopic characters? **06**
- (b) What physical constants and chemical parameters are usually determined for quality control of crude drugs? **05**
- (c) Write a note on chromatographic evaluation of crude drugs. **05**
- Q. 6** (a) What are the biological sources and pharmaceutical applications of Guar gum, Pectin and Isabgol? **06**
- (b) What are gums? Write a note on gum Acacia and Gum Tragacanth **05**
- (c) What is the biological source and method of preparation of honey? How do you Test it? What are its uses? **05**
- Q.7** (a) **06**  
What are fixed oils, fats and waxes? Define Saponification value, Iodine value and Acid Value.
- (b) What are the biological sources, chemical constituents and therapeutic Uses of castor oil, cod liver oil and hydnocarpus oil? **05**
- (c) **05**  
Describe the biological sources, preparation and pharmaceutical uses of Bees wax and wool fat .

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