

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – III • EXAMINATION – SUMMER • 2015

Subject Code: 2230006**Date: 16-06-2015****Subject Name: Pharmacognosy - 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 Crude drugs, classify them, and explain chemical classification with suitable example. **06**
- (b) Differentiate between monocot and dicot root, both morphologically and microscopically. **05**
- (c) Describe in brief marine and animal as sources of crude drugs. **05**
- Q.2** (a) What is Pharmacognosy? Describe its history and scope for future drug development. **06**
- (b) What are plant growth hormones? How do they regulate the growth of plants? **05**
- (c) Discuss in brief various parts of plants with their function. **05**
- Q.3** (a) Discuss the advantages of cultivated medicinal plants over wild plants. List out the various intrinsic and extrinsic factors affecting Cultivation and collection of medicinal Plants. **06**
- (b) Differentiate terms organized and unorganized crude drugs with examples. **05**
- (c) Describe the terms mutation and hybridization and explain their role in cultivation of medicinal plants. **05**
- Q.4** (a) Define the following terms: **06**
- i) Palisade ratio ii) Polypoidy iii) Saponification value
- iv) Stomatal index v) Bark iv) Vascular bundles
- (b) Discuss the role of chemotaxonomy in classification of crude drugs. **05**
- (c) Define Alkaloids and Tannins. Add note on classification, properties and chemical test of alkaloids. **05**
- Q.5** (a) What physical constants and chemical parameters are usually determined for quality control of crude drugs? **06**
- (b) What do you mean by active constituents? Explain with suitable examples. **05**
- (c) What are gums? Differentiate Gum Acacia and Gum Tragacanth. **05**
- Q. 6** (a) What are lipids? Give their general properties. Differentiate Fats, Fixed oils and waxes giving suitable example. **06**
- (b) Define Adulteration of crude drugs. Discuss different types of adulteration with suitable examples. **05**
- (c) What is the biological source, properties and method of preparation of honey? What are its uses? **05**

- Q.7**
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| (a) | Write Botanical Source, Family, Chemical Constituents, and uses of following drugs:
(i) Wool fat
(ii) Sesame oil
(iii) Kokum butter | 06 |
| (b) | Give the biological source, chemical constituent and uses of any one fixed oil each from plant and marine source. | 05 |
| (c) | Define carbohydrates and add notes on Starch and Pectins | 05 |
