

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. Pharm. - SEMESTER-8 • EXAMINATION – SUMMER -2018**

**Subject Code: 2280005****Date: 07/05/2018****Subject Name: Pharmacognosy-VI****Time: 10:30 AM TO 01:30 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) Discuss the WHO guidelines for standardization of phytopharmaceuticals. **06**  
(b) Write different chemical tests used for identification of Caffeine. **05**  
(c) Describe the method of isolation of Ephedrine **05**
- Q.2** (a) Describe the following terms related to herbal extracts, with the help of proper diagrams. **06**  
(i) Maceration (ii) Percolation (iii) Soxhlet extraction  
(b) Comment on concept of ISO-9000 in herbal drug industry. **05**  
(c) Mention recent herbal drugs which are used as Hepatoprotectives. **05**
- Q.3** (a) Explain various physical parameters used for evaluation of herbal drugs. **06**  
(b) What is the method of preparation and evaluation of Garlic extract? Also state its use. **05**  
(c) Mention natural source and suitable method for isolation of Vitamin A. **05**
- Q.4** (a) Write natural sources of Sennosides and the method of isolation of Sennosides. **06**  
(b) Enlist various herbs used as **05**  
(i) Antiasthmatic (ii) Tranquilizers  
(c) Explain importance of Phytopharmacovigilance in industry. **05**
- Q.5** (a) Define and classify terpenoids. Write isolation method of  $\beta$ -carotene in brief. **06**  
(b) Discuss the modern herbal drugs implemented as Hypolipidemics. **05**  
(c) Discuss about infrastructure and staff requirement of an herbal drug industry. **05**
- Q.6** (a) Write different chemical tests for identification of glycosides. Give natural source for Diosgenin. **06**  
(b) State the major sources of Curcumin and the method of isolation of Curcumin. **05**  
(c) Discuss in detail the process of isolation of Penicillin. **05**
- Q.7** (a) What are the macroscopic and microscopic procedures used with respect to leaves for standardization of herbal drugs? **06**  
(b) Write a note on Garcenia, emphasizing on its chemical constituents, extraction and uses. **05**  
(c) Write different isolation and identification methods for Quinine. **05**

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