

**GUJARAT TECHNOLOGICAL UNIVERSITY****B.Pharm. - SEMESTER– VIII• EXAMINATION – SUMMER-2016****Subject Code:2280005****Date:06/05/2016****Subject Name: Pharmacognosy -VI****Time: 10:30 AM to 1:30 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) Describe in detail four different methods which are used to prepare herbal extracts. **06**
- (b) Describe method for preparation of Amla and Garlic extracts. **05**
- (c) Mention different parameters required for standardization Amla extract & discuss them in detail. **05**
- Q.2** (a) Discuss about what do you mean phytopharmaceuticals evaluation. **06**
- (b) Describe different analytical technique employed for phytopharmaceutical evaluation. **05**
- (c) Discuss problems faced in India for phytopharmaceutical evaluation. **05**
- Q.3** (a) Mention natural sources for caffeine. Describe in detail suitable method for isolation of caffeine from above sources. **06**
- (b) Mention natural sources for diosgenin. Describe a suitable commercial method for isolation of diosgenin from it. **05**
- (c) Enumerate different methods for estimation of diosgenin. Describe any modern method for estimation of diosgenin. **05**
- Q.4** (a) Mention natural sources for Sennosides. Describe a suitable method for isolation of Sennosides. **06**
- (b) Describe a suitable method for estimation of Sennosides in a natural source. **05**
- (c) Describe a suitable method for isolation of curcumin from a natural source. **05**
- Q.5** (a) Mention natural sources for menthol. Describe in detail suitable method for isolation of menthol from a natural. **06**
- (b) Enlist different methods for estimation of citral from natural sources. Describe a suitable method for estimation of citral from a natural source. **05**
- (c) Describe a suitable method for isolation of penicillin. **05**
- Q. 6** (a) Discuss about requirement of infrastructure, staff and equipments for herbal drug industry. **06**
- (b) Describe different types of processes, type of research and development work and pilot scale up techniques, which are carried out in herbal drug industry. **05**
- (c) Describe a suitable method for isolation of atropine from a natural source. **05**
- Q.7** (a) Write a short note on phytopharmacovigilance. **06**
- (b) Name different herbs and their active constituents which are useful as hepatoprotective. **05**
- (c) Name different herbs and their active constituents which are useful as antidiabetic or anticancer agent. **05**