

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Ph. SEMESTER – VI • EXAMINATION – SUMMER -2022**

**Subject Code: 2260006****Date: 15/06/2022****Subject Name: Pharmacognosy IV****Time: 10:30AM TO 01:30PM****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) Differentiate the following: **06**  
       1) *Rauwolfia canescens* – *Rauwolfia serpentina*  
       2) Indian lobelia – European lobelia  
       3) Rio Ipecac – Cartagena Ipecac
- (b) Write a brief note on bromelain and streptokinase. **05**  
 (c) Write a pharmacognostical note on antimalarial bark. **05**
- Q.2** (a) Define alkaloid. Give chemical classification of alkaloids with examples. **06**  
 Describe a general method for isolation of alkaloids.  
 (b) Write a note on imidazole alkaloid containing drug. **05**  
 (c) Describe chemical tests for identification of ergot alkaloids, meconic acid, emetine, caffeine and strychnine. **05**
- Q.3** (a) Write down botanical sources, chemical constituents and uses of any three steroidal alkaloids containing drugs. **06**  
 (b) Give names, biological sources and active constituents of two drugs which are used in treatment of amoebic dysentery. **05**  
 (c) Write a pharmacognostical note on withania. **05**
- Q.4** (a) Write biological source, preparation, identification tests and uses of vegetable pepsin. **06**  
 (b) Describe chemical tests for identification of tropane alkaloids, quinine, ephedrine, reserpine and brucine. **05**  
 (c) Explain in detail about source and life cycle of Ergot. **05**
- Q.5** (a) Differentiate the following: **06**  
       1) Egyptian henbane – European Henbane  
       2) *Datura metel* – *Datura innoxia*  
       3) *Strychnous nuxvomica* - *Strychnous ignitis*  
 (b) Describe cultivation and collection of opium in India. **05**  
 (c) Write a brief note on talc and diatomite. **05**
- Q. 6** (a) Define Pharmaceutical aids. Write a brief note on fibres. **06**  
 (b) Describe any five biological sources and active chemicals for natural colors. **05**  
 (c) Write a brief note on marine anticancer and antiviral drugs. **05**
- Q.7** (a) Give names, biological sources and active constituents of three drugs which are used in treatment of cancer. **06**  
 (b) Write a note on quinazoline alkaloid containing drug. **05**  
 (c) Describe morphology and draw well labelled diagrams of morphology and microscopy of tylophora. **05**