

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BPHARM - SEMESTER- V • EXAMINATION – WINTER 2012

Subject code: 250006

Date: 23-01-2013

Subject Name: Pharmacognosy- IV

Time: 10:30 am – 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) Name different species of Cinchona and describe cultivation and collection of Cinchona in India. (06)
(B) Describe biosynthesis and uses of Quinine. (05)
(C) Draw labelled diagrammes showing morphological and microscopical characters of Cinchona. (05)
- Q.2 (A) Name different species of Rauwolfia growing in India. Describe cultivation and collection of Rauwolfia in India. (06)
(B) Describe acetate mevalonate pathway showing biosynthesis of medicinally important Compounds. (05)
(C) Draw labelled diagrammes showing morphological and microscopical characters of Rauwolfia. (05)
- Q.3 (A) Describe biological sources, geographical sources, cultivation, collection and preparation of Opium in India. (06)
(B) Name active constituents of Opium, draw their structures and give their medicinal values. (05)
(C) Draw labeled diagrammes showing morphological and microscopical characters of Ephedra. (05)
- Q.4 (A) Give names of drugs, their biological source, family and active constituents for following Purpose (Any Three) i) Asthama ii) Amoebic dysentery iii) Migraine iv) Polyploidy (06)
(B) Write short notes on Aconite and Veratrum. (05)
(C) Write short notes on Coca and Dubosia. (05)
- Q.5 (A) Give points of difference between following pair of Drugs (Any three) (06)
i) Rio Ipecac and Cartegena Ipecac ii) Strychnos nuxvomica and S. ignitiis
iii) Datura metel and Datura innoxia iv) Hyoseyamus niger and Hyoseyamus muticus
(B) Describe Acetate mevalonate pathway showing biosynthesis of medicinally important Triterpenoids. (05)
(C) Give biological sources, Active constituents with their Structures and uses of following (Any Two). i) Belladonna ii) Withania iii) Lobelia. (05)
- Q.6 (A) Give names, biological sources and active constituents of three Anticancer Drugs. (06)
(B) Giving suitable examples explain how Stereoisomerism play active role in biological activity. (05)
(C) Explain giving suitable examples how biosynthetic pathways can be studied in plants. (05)
- Q.7 (A) Draw and chemical structure and describe chemical test for identification of following (Any three). I) Meconic acid ii) Emetine iii) Strychnine iv) Caffeine. (06)
(B) Write shortnotes on: i) Ergotism and ii) Alkaloids of Vasaka (05)
(C) Name different Species of Tobacco giving their morphological difference. Give active constituents of Tobacco giving their harmful effects. (05)
