Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY B.PHARM - SEMESTER-V • EXAMINATION – SUMMER 2017

Subject Code: 2250006 Date: 16/06/2017 Subject Name: Pharmacognosy III 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** Write down the structure and identification tests for following 06 (a) phytoconstituents 1) Sennoside B 2) Rutin 3) Digitoxose Give the difference between Cardenolide & bufadienolide and write note any (b) 05 one bufadienolide containing drugs. Write note on bitter tonic drugs. (c) 05 **Q.2** Discuss the different sources of Liquorice and give its chemical constituents 06 and pharmacological actions. Define Saponin glycoside. Give the difference between steroidal Saponin and (b) 05 triterpenoid Saponin (including structure). Write note on one bark drug which has cardiotonic activity. 05 (c) Q.3 Discuss the distinguishing Morphological, Microscopical & chemical feature of 06 Alexandarian & Tinnevelly Senna. (b) Define Glycoside and explain its physicochemical properties, functions and 05 extraction methods. Write down the complete pharmacognosy of Gymnema. 05 (c) 0.4 (a) Write down complete pharmacognosy of one adaptogenic drug. 06 Write down Biological sources and chemical constituents of senega and explain 05 (b) transverse section of it with proper label. Give the different species of Rhubarb with geographical sources and give the 05 (c) Chemical constituents and identification tests for rhubarb. Q.5 Give the difference between following drugs. 06 (a) 1) Digitalis purpurea and Digitalis lanata 2) Centella asiatica and Bacopa moniera Give Biological source, family, chemical constituents and uses of calophyllum 05 (b) and Bhilama. 05 Write down complete pharmacognosy of Flax seed. (c) Define tissue culture. Write down laboratory requirement for it. Q. 6 06 (a) Discuss the applications of plant tissue culture for production of 05 phytoconstituents.

Give Biological source, family, chemical constituents and uses of Salix and

Write down Biological source, chemical constituents and uses of Rue and

05

06

05

05

Write note on protoplast culture and somatic hybridization.

Write down composition of nutrient media for plant tissue culture.

(c)

(a)

(b)

(c)

Bhangro.

Palash.

Q.7