

GUJARAT TECHNOLOGICAL UNIVERSITY**B.Pharm - SEMESTER-V- (NEW SYLLABUS) EXAMINATION – SUMMER-2015****Subject Code:2250006****Date: 08/05/2015****Subject Name: PHARMACOGNOSY-III****Time:2:30 pm to 5:30 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) Write in brief about the Plant tissue culture and it's significance in Pharmacognosy. **06**
- (b) Discuss Micro & Macronutrients requirements of plant cells in culture medium. **05**
- (c) Define the term "Callus tissue" and "Totipotency". **05**
- Q.2** (a) Write brief notes on *Ruta graveolens*. **06**
- (b) Illustrate the important microscopic features of Nerium leaf and add a note on its market formulations. **05**
- (c) "Cascara bark is stored for 1 year then taken into use"-Comment on this statement. **05**
- Q.3** (a) Write the difference between (i) European squill and Indian Squill (ii) Alexandrian Senna and Indian Senna **06**
- (b) Write the Pharmacognosy of a memory enhancer drug included in your syllabus. **05**
- (c) "Aloe gives modified bornttager test while Senna gives bornttager test" Justify this comment. **05**
- Q.4** (a) Draw the structure of the following.(i) Sennoside A &B (ii)Andrographolide (iii) Amygdalin **06**
- (b) Write the difference between Chirata and Kalmegh. **05**
- (c) Write a note on Saponin glycosides. **05**
- Q.5** (a) Describe this Chemical test----(i) Bornttager's test (ii)Keller –killiani test **06**
- (b) Give note on Artificial-seeds. **05**
- (c) Prepare a note on Cyanogenic glycosides. **05**
- Q. 6** (a) Write the biological sources, Chemical constituents and uses of Mustard and Black mustard. **06**
- (b) Name a bark belonging to the family Combretaceae. Give its source, constituents, pharmacological actions and uses. **05**
- (c) Write Pharmacognosy of *Trigonella foenum-graecum*. **05**
- Q.7** (a) Discuss in detail requirements to establish a plant tissue culture laboratory. **06**
- (b) What is cryopreservation? Discuss its advantages. **05**
- (c) Explain cell suspension culture in detail. **05**
