

# UKA TARSADIA UNIVERSITY

B.Pharm. (5th Semester)

Subject :030020504-Pharmacognosy III

Time : 10:00 am to 1:00 pm

Date : 06/12/2013

Duration : 3 Hours

Max. Marks : 70.

## Instructions:

1. Attempt all questions.
2. Write each section in a separate answer book.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks allocated to that question.
5. Draw diagrams/figures whenever necessary.

## SECTION - 1

**Q-1 (A) Do as directed.** [07]

- I) Define Chemotaxonomy.
- II) Write isoprene rule.
- III) Give various sources for atropine.
- IV) Define iridoids.
- V) Give sources and uses of Vitamin A.
- VI) Give name of two natural photosensitizing agents.
- VII) Draw the structure of Morphine

**Q-1 (B) Answer the following in brief. (Any 4)** [08]

- I) Enlist merits and demerits of chemotaxonomy.
- II) Differentiate photodynamic and photosensitizing agents.
- III) Write a note on fungal toxins.
- IV) Give classification of Marine drugs.
- V) Write medicinal importance of Xanthophylls
- VI) Write a note on iridoids.

**Q-2 Answer the following.** [10]

- A) Discuss in detail about biosynthesis of Quinine.

**OR**

- A) Write a short note on Photodynamic therapy.  
B) Classify Natural Allergens and explain in detail about Inhalant natural allergens.

**OR**

- B) Give classification of terpenoids with suitable examples.

**Q-3 Answer the following in detail. (Any 2)** [10]

- A) Write chemistry of Geraniol.
- B) Discuss in detail about biosynthesis of Atropine.
- C) Write in detail about chemistry of  $\beta$ -carotenes

## SECTION - 2

**Q-4 (A) Do as directed.** [07]

- I) Give biological source of Dubosia.
- II) Write uses of camptotheca.

- III) Define totipotency.
- IV) Give details of Van Urk's test.
- V) Draw structure of reserpine.
- VI) Enlist various micronutrients.
- VII) Give biological source of different varieties of cinchona.

**Q-4 (B) Answer the following in brief. (Any 4)**

**[08]**

- I) Give chemical tests of Nux vomica.
- II) Give composition of MS media.
- III) Give Differences between Static culture and Suspension culture
- IV) Draw neat and clean diagram of TS of Kurchi.
- V) Give biological source and chemical constituents of Ipecac.
- VI) Give detail of vitali morine test and thelleoquine test.

**Q-5 Answer the following.**

**[10]**

- A) Write a note on history of Plant tissue culture.

**OR**

- A) Discuss in detail about protoplast culture and protoplast fusion.
- B) Write detail pharmacognosy of Ephedra.

**OR**

- B) Write detail pharmacognosy of Vasaka.

**Q-6 Answer the following in detail. (Any 2)**

**[10]**

- A) Discuss basic requirements for tissue culture laboratory.
- B) Give detail procedure for cultivation and collection of Opium.
- C) Discuss in detail about life cycle of Ergot.