

# UKA TARSADIA UNIVERSITY

B.Pharm. (4th Semester)

Subject :030020404-Pharmacognosy II

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 Glycoside.
- II) Give details of Gold beater's test.
- III) Enumerate the biological source of different varieties of Aloe.
- IV) Define resins.
- V) Draw chemical structure of Eugenol.
- VI) Write the uses of Quillaia.
- VII) Give biological source of Podophyllum.

### Q-1 (B) Answer the following in brief. (Any 4)

[08]

- I) Discuss in details about cultivation & collection of cinnamon.
- II) Give details about the isolation method for glycosides.
- III) Differentiate between cardenolides and bufadienolides.
- IV) Draw and labeled morphology and microscopical characters of Fennel fruit.
- V) Discuss various common characteristic features of Umbelliferous plants.
- VI) Enumerate different physical and chemical properties of volatile oil.

### Q-2 Answer the following.

[10]

- A) Give a brief note on role of plant based drugs in the national economy.

**OR**

- A) Define secondary metabolites. Write a note on tracer techniques.
- B) Write biological source, family, chemical constituents, uses and substitutes of Senna.

**OR**

- B) Write biological source, family, chemical constituents, uses and adulterants of Digitalis.

### Q-3 Answer the following in detail. (Any 2)

[10]

- A) Define volatile oil. Discuss in details about the methods of isolation of volatile oil.
- B) Discuss detail pharmacognostical profile for the enzyme papain.
- C) Discuss in detail about shikimic acid pathway.

## SECTION - 2

### Q-4 (A) Do as directed.

[07]

- I) Enumerate various chemical tests for alkaloids.
- II) Give uses of sandal wood.
- III) Which type of stomata is present in Senna leaves?

- IV) Give details of modified brontager's test.
- V) Give the uses of Dioscorea.
- VI) Define oleo-gum-resin.
- VII) Enumerate various products of cannabis.

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

**[08]**

- I) Differentiate between European Dill and Indian Dill.
- II) How will you differentiate different varieties of Aloe by chemical tests?
- III) Draw neat and labeled diagram of T.S. of Linseed.
- IV) Differentiate between Indian Rhubarb and Chinese Rhubarb.
- V) Discuss various chemical tests used to screen saponin glycosides.
- VI) Classify glycosides on the basis of glycosidic linkage.

**Q-5 Answer the following.**

**[10]**

- A) Give detail scheme for the biosynthesis of Digitoxin.

**OR**

- A) Write detail pharmacognosy of Gentian.
- B) Write biological source, family, chemical constituents and uses of Myrrh.

**OR**

- B) Write biological source, family, chemical constituents and uses of Tolu balsam.

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

**[10]**

- A) Discuss in detail about Acetate-Mevalonate Pathway.
- B) Write in detail about cultivation and collection of Digitalis.
- C) Discuss in detail about the pharmacognostical profile of Turmeric.