

# UKA TARSADIA UNIVERSITY

030020204 - Pharmacognosy I (THEORY) at the B.Pharm. (2nd Semester)

Subject :030020204 - Pharmacognosy I

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.
5. Draw diagrams/figures whenever necessary.

## Section-1

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

- I) Define: Rhizome
- II) Define: Mutation
- III) Define: Trichome
- IV) Define: Stomatal index
- V) Enumerate plant growth regulators.
- VI) Write down significance of ash value in crude drug evaluation.
- VII) What do you mean by adulteration of crude drugs?

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

- I) Define: stomata. Write down types of stomata with examples.
- II) Which physical constants are determined for quality control of crude drugs?
- III) Describe different types of leaf margins.
- IV) What do you mean by crude drugs evaluation? Why it is necessary?
- V) Explain polyploidy with suitable examples.
- VI) Classify fruits with suitable examples.

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

- A) What is Pharmacognosy? Describe history and scope of Pharmacognosy.

OR

- A) Give the microscopic differences between dicotyledonous and monocotyledonous stem.

- B) Discuss in detail about factors affecting cultivation, collection and processing of crude drugs.

OR

- B) Differentiate between simple leaf and compound leaf.

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

- A) Enumerate different methods of classification of crude drugs. Discuss in detail pharmacological classification of crude drugs.

- B) What is quantitative microscopy? Discuss in detail about lycopodium spore method.

- C) Define bark. Draw & describe different shapes of it with suitable examples.

## Section-2

**Q-4 (A) Do as directed:**

**[07]**

- I) Write down biological sources of kokum butter.
- II) What is pectin?
- III) Write down biological sources of wool fat.
- IV) Write down Molisch test.
- V) Write the biological source of linseed oil.
- VI) Define: Acid value
- VII) Write down uses of cod liver oil.

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

**[08]**

- I) Differentiate between fats and waxes.
- II) Differentiate between amylose and amylopectin.
- III) Differentiate between gambier and black catechu.
- IV) Differentiate between gum and mucilage.
- V) Differentiate between silk and wool.
- VI) Differentiate between raw cotton and absorbent cotton.

**Q-5 Answer the following:**

**[10]**

- A) Define tannins. Give classification, properties, general uses and chemical tests of tannins.

OR

- A) Write biological source, cultivation, morphology, chemical constituents and uses of Isapgol.

- B) What are lipids? Classify them and give complete pharmacognosy of castor oil.

OR

- B) Write down biological source, preparation and pharmaceutical uses of honey.

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

**[10]**

- A) Define carbohydrates. Describe preparation and chemical constituents of agar.
- B) Describe pharmacognosy of bees wax & hydnocarpus oil.
- C) Discuss in detail about marine organisms as a source of drugs.