

INSTITUTE OF TEACHING AND RESEARCH IN AYURVEDA, JAMNAGAR  
M.SC. ( MEDICINAL PLANTS SCIENCES) FIRST YEAR EXAMINATION - August - 2023

**Phytochemistry**

Date : 08/08/2023

Tuesday

Time : 09:30 A.M. - 12:30 P.M.

Marks : 100

- Instructions : 1. Attempt any five questions.  
2. All questions carry equal marks.

1. Define Fat and write down the different methods for extraction of Fat from plant materials in detail.
2. Discuss the paper chromatography in detail.
3. Write down the detail note on Quality control and Standardization of medicinal plants and their products.
4. Discuss the Mass spectroscopy with it's instrumentations and applications.
5. Explain the role of UV spectroscopic analysis in phytochemistry.
6. Write short note on any Two of the following :
  - A. Nephelometry and Turbidimetry.
  - B. J- Coupling Constant.
  - C. Column Chromatography.

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Pharmacognosy

Date : 07/08/2023

Time : 09:30 A.M. - 12:30 P.M.

Monday

Marks : 100

Note :-

- Attempt any five questions.
- All questions carry equal marks.
- Draw annotated diagrams and structural formulae wherever necessary.

- 1 Define Pharmacognosy and discuss plant as a source of drug in detail.
- 2 What are starches, give its detail classification and exemplify its role in identification point of view.
- 3 What do you mean by substitute and adulterants ? Enumerate your answer with suitable examples.
- 4 What are bitter glycosides ? What do you mean by bitter value ? Write a detail account on Mamejjak.
- 5 Write a note on volatile oil and discuss any two underground drugs containing them.
- 6 Write short notes on the following :
  - (A) Eucelle.
  - (B) Pseudo tannin.
  - (C) Honey.
- 7 Define flavoroid glycoside. Give detail account on Yashtimadhu.

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# INSTITUTE OF TEACHING AND RESEARCH IN AYURVEDA

M.Sc.(Medicinal Plants) First Year Examination - August - 2023

## Medicinal Plant Cultivation

Date: 05-08-2023  
Saturday

Time: 09:30 A.M. to 12:30 P.M.  
Marks: 100

**Note :-**

- Attempt any five questions.
- All questions carry equal marks.
- Draw annotated diagrams and structural formulae wherever necessary.

- 1 Give detail account of Agro-climatic zones of India related with special reference to medicinal plants.
- 2 Give synonyms, functions and different parts of Pushpa. Description of different types and classification.
- 3 Describe G.A.P. and G.C. P. of Kalamegha and Shatavari. Add note on their economy.
- 4 How the soil formation is takes place? Describe soil formation rocks. Add note on chemical properties of soil.
- 5 Describe detail about different types of irrigation. Add note on advantages and disadvantages.
- 6 Write short notes on any two of the following :
  - (A) Growth regulators.
  - (B) Mula classification with respect to Vrikshayurveda.
  - (C) Mother beds.

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**Dravyaguna**

Date : 04/08/2023

Time : 09:30 A.M. - 12:30 P.M.

Friday

Marks : 100

Instructions : 1. Attempt any five questions.  
2. All questions carry equal marks.

1. Write the botanical name, two synonyms with their elucidation, major therapeutic indications and prescribed dose and two frequently prescribed formulations containing the drug as major ingredient of the following drugs.

1.Khadira 2. Arjuna 3. Jiraka 4. Manjistha

2. Write the botanical name, distribution, varieties, major chemical constituents and dosha karma of following dravya.

1.Shariva 2. Trivrit 3. Kantakari 4. Sankhapuspi

3. Write the Latin name, market name, parts used, prescribed dose, major therapeutic indications of following drugs.

1.Bhallataka 2. Arka 3. Yastimadhu 4. Amalaki

4. What are the different parts use of a medicinal plant used in Ayurveda ? Write down each parts use with example of two medicinal plants( botanical name)

5. Write the Latin name, two synonyms, major therapeutic indications, common adulterants and formulations of at least two plants from following family.

1.Asteraceae 2. Oleaceae 3. Cucurbitaceae 4. Convolvulaceae

6. Write the short notes on:

a.Tridosha b. Virya c. Anulomana d. Churna

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Botany

Date : 03/08/2023

Time : 09:30 A.M. - 12:30 P.M.

Thursday

Marks : 100

Note :-

- Attempt any five questions.
- All questions carry equal marks.
- Draw annotated diagrams and structural formulae wherever necessary.

- 1 Give silent features of the family "Asteraceae". Classify systematically any four plant which you studied with Sanskrit name, Part used and uses.
- 2 Classify along with Botanical name, Sanskrit name, Part used and uses of following : (any five)  
(A) Aragvadha. (D) Jivanti.  
(B) Shigru. (E) Kalmegha.  
(C) Coffee. (F) Ashwagandha.
- 3 Give short note on following : (any five)  
(A) Umbel Inflorescence. (D) Rhizome.  
(B) Conifers Forest. (E) Ethno Botany.  
(C) Capsule Fruit. (F) Floral Part of Nerium
- 4 (A) Ecological grouping of plants with suitable examples.  
(B) Type of placentation with examples
- 5 Give a complete classification of Bentham and Hooker system up to order with merits and demerits.
- 6 Write short notes on following plants –  
(A) Neem. (C) Nirgundi.  
(B) Haritaki. (D) Bibhitaka.
- 7 Explain any two plant of family "Apocynaceae" with classification flower character, Flower, Formula, Parts used and uses.  
(A) Nerium Karvira.  
(B) Sada Pushpi.  
(C) Sapta Parna

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