

**INSTITUTE OF TEACHING AND RESEARCH IN AYURVEDA**  
[INSTITUTE OF NATIONAL IMPORTANCE]  
MINISTRY OF AYUSH, GOVERNMENT OF INDIA

**B. PHARM. (AYU.) II YEAR**  
**PHARMACOGNOSY OF AYURVEDIC DRUGS I**

**Question Bank**

**SECTION :- A**

**1. Chapter :- Classification of plant kingdom with brief account of plant nomenclature.**

**[10 Marks]**

1. Give detail account on classification of plant kingdom.

**[05 Marks]**

1. Describe Thallophyta and Bryophyta in detail.
2. Describe Pteridophytes and Spermatophytes in detail.
3. What do you mean by Dicot and Monocot.

**[02 Marks]**

1. Describe Thallophyta.
2. Describe Bryophyta.
3. Describe Pteridophyta.
4. Describe Spermatophyta.
5. What do you mean by Binomial Nomenclature ?
6. What are Genus and Species ?

**2. Chapter :- Morphology of various parts of the plant used in Ayurveda.**

**[10 Marks]**

1. What is Root ? Discuss its various types in detail.
2. Define Leaf & give its detail classification with suitable examples.
3. Discuss various types of Apex & Margine with suitable examples.
4. Describe various shapes of leaf with suitable examples.
5. What is Inflorescences. Describe its various types with suitable examples.
6. Give detail account on attachment of Anther to the Filament & Discuss the types of Aestivation.
7. Define Fruit & Give detail account on Dry Fruit.
8. Discuss Fleshy Fruit with suitable examples.
9. Explain Aggregate & Multiple Fruits with suitable examples.
10. Discuss various types of Placentation with suitable examples.

11. Define Bark & Wood and give detail account with examples.

**[05 Marks]**

1. Give an account on modification of Root.
2. Give an account on modification of Stem.
3. What do you mean by Compound Leaf ?
4. Types of Root.
5. Shapes of Leaf.
6. Apex of Leaf.
7. Margine of Leaf.
8. Inflorescences.
9. Attachment of Anther to the Filament.
10. Aestivation.
11. Placentation.
12. Dehiscent Fruit.
13. Indehiscent Fruit.
14. Flashy Fruit.
15. Compound Fruit.
16. Simple Fruit.
17. Schizocarpic Fruit
18. Define Ovule. Draw neat & clean diagram of Ovule, Label and Discuss in detail.
19. Pinnately & Palmately compound leaf.

**[02 Marks]**

1. Leaf
2. Stem
3. Fruit
4. Flower
5. Root
6. Seed
7. Pericarp
8. Bark
9. Wood
10. Legume
11. Follicle
12. Siliqua
13. Capsule
14. Achne
15. Caryopsis
16. Cypsela
17. Nut
18. Samara
19. Lomentum
20. Cremocarp
21. Carcerule
22. Regma
23. Drupe
24. Pome

25. Berry
26. Pepo
27. Hesperidium
28. Balaustra
29. Amphisarca
30. Sorosis
31. Syconus
32. Racem
33. Corymb
34. Umbel
35. Spike
36. Spikelet
37. Spadix
38. Capitulum or Capitates
39. Cymose
40. Verticillaster
41. Hypanthodium

**3. Chapter :- Classification of plant and study of the following families with special reference to medicinally important plants:**

**[10 Marks]**

1. Describe the diagnostic characters of Fabaceae plant family and give the morphological characters of any one medicinal plant belong to it.
2. Describe the diagnostic characters of Liliaceae plant family and give the morphological characters of any one medicinal plant belong to it.
3. Describe the diagnostic characters of Menispermaceae plant family and give the morphological characters of any one medicinal plant belong to it.
4. Describe the diagnostic characters of Cruciferae plant family and give the morphological characters of any one medicinal plant belong to it.
5. Describe the diagnostic characters of Malvaceae plant family and give the morphological characters of any one medicinal plant belong to it.
6. Describe the diagnostic characters of Rutaceae plant family and give the morphological characters of any one medicinal plant belong to it.
7. Describe the diagnostic characters of Caesalpiniaceae plant family and give the morphological characters of any one medicinal plant belong to it.
8. Describe the diagnostic characters of Mimosae plant family and give the morphological characters of any one medicinal plant belong to it.
9. Describe the diagnostic characters of Asteraceae plant family and give the morphological characters of any one medicinal plant belong to it.
10. Describe the diagnostic characters of Apocynaceae plant family and give the morphological characters of any one medicinal plant belong to it.
11. Describe the diagnostic characters of Solanaceae plant family and give the morphological characters of any one medicinal plant belong to it.
12. Describe the diagnostic characters of Convolvulaceae plant family and give the morphological characters of any one medicinal plant belong to it.

**[05 Marks]**

1. Give botanical description on plant Guduchi.
2. Give botanical description on plant Sarsapa.
3. Give botanical description on plant Japa.
4. Give botanical description on plant Aparajita.
5. Give botanical description on plant Vilayati Bhringraj.
6. Give botanical description on plant Sadapushpi.
7. Give botanical description on plant Datura.
8. Give botanical description on plant Kumara.

**[02 Marks]**

1. Give uses of Guduchi.
2. Give uses of Sarsapa.
3. Give uses of Japa.
4. Give uses of Bilva.
5. Give uses of Aparajita.
6. Give uses of Chakaramard.
7. Give uses of Vilayati Bhringraj.
8. Give uses of Sadapushpi.
9. Give uses of Datura.
10. Give uses of Sankhapushpi.
11. Give uses of Kumara.

**4. Source of drugs : Plant and Mineral.**

**[10 Marks]**

- 1) Discuss Plant as a source of drugs in detail.
- 2) Discuss Mineral as a source of drugs in detail.

**5. Chapter :- Importance of Tissue Culture in Pharmacy.**

**[10 Marks]**

- 1) Discuss Tissue Culture as a source of drugs.
- 2) What is the Importance of tissue culture in pharmaceutical industry?

**6. Chapter :- Cultivation, collection, processing and storage of crude drugs and their impacts on medicinal plants.**

**[10 Marks]**

1. Define cultivation and discuss its importance.
2. Describe cultivation of crude drugs in detail.
3. Describe drying method of crude drugs in detail.
4. Explain the method of drying of drug in detail.
5. Discuss collection, processing & storage of crude drugs in detail.

6. Discuss various method of propagation.

**[05 Marks]**

1. Discuss plant growth regulators.
2. Sexual method of propagation with advantages and dis advantages.
3. Asexual method of propagation with advantages and dis advantages.

**[02 Marks]**

1. Gibbrellins.
2. Cytokinins
3. Ethylene.
4. Abscicic acid.
5. Tray dryers.
6. Vacuum dryers.
7. Spray dryers.

**SECTION :- B**

**7. Definition, historical background & scope of pharmacognosy.**

**[10 Marks]**

1. Define pharmacognosy & discuss its scope in detail.

**[05 Marks]**

1. Discuss history of pharmacognosy.
2. Discuss scope of pharmacognosy.

**[02 Marks]**

1. Pharmacognosy.

**8. Chapter :- Introduction to various Indian system of medicine.**

**[10 Marks]**

- 1) Give different types of Indian system of Medicine.
- 2) Discuss in detail Homeopathy system of medicine.
- 3) Discuss in detail Unani system of medicine.
- 4) Discuss various Indian system of medicine. Add a note on scope and development of Pharmacognosy.
- 5) Discuss in detail Ayurved system of medicine.

**[05 Marks]**

1. Unani system of medicine.
2. Ayurveda and siddha system of medicine.

**[02 Marks]**

1. Give name of various formulations of Ayurved system of medicine.
2. What is Ayurved ?
3. What is Unani ?
4. What is Homeopathy ?
5. What is Sidhha ?

**9. Chapter :- Classification and systematic study of crude drugs especially those belonging to plant origin.**

**[10 Marks]**

1. Define pharmacognosy. Discuss various types of classification of crude drugs in detail with suitable examples.
2. Define pharmacognocny. Discuss the pharmacological, chemical and morphological classification of crude drugs in detail with suitable examples.
3. Discuss morphological & Chemical Classification of Crude drugs with suitable examples.
4. Discuss Alphabetical & Taxonomical Classification of Crude drugs with suitable examples.
5. Define crude drugs. How they are classified? Discuss each classification in detail with suitable examples.

**[05 Marks]**

- 1) Pharmacological classification of crude drugs.
- 2) Alphabetical classification of crude drugs.
- 3) Taxonomical classification of crude drugs.
- 4) Chemical classification of crude drugs.
- 5) Morphological classification of crude drugs.

**[02 Marks]**

1. Define crude drugs.
2. Define organized drugs.
3. Define unorganized drugs.

**10. Chapter :- Structure of typical plant cell and its importance inclusion, structure and function of importance plant tissue like parenchyma, sclerenchyma, xylem, phloem, etc.**

**[10 Marks]**

1. What is tissues & discuss its various types.
2. Define Vascular bundle & Give detail account on its.
3. Discuss simple tissues in detail.

**[05 Marks]**

1. Discuss parenchyma in detail.
2. Discuss sclerenchyma in detail.
3. Discuss xylem in detail.
4. Discuss phloem in detail.
5. Discuss collenchymas & aerenchyma in detail.
6. Discuss epidermis & cork in detail.
7. Discuss pericarp in detail.

**[02 Marks]**

1. Xylem.
2. Phloem.
3. Sclerenchyma.
4. Parenchyma.
5. Collenchymas
6. Aerenchyma
7. Pericarp
8. Cork
9. Epidermis
10. Endosperm
11. Testa
12. Embryo

**11. Chapter :- Anatomical identification of various parts of the plant used in Ayurved.**

**[10 Marks]**

1. Differentiate Dicot & Monocot stem.
2. Differentiate dicot & Monocot root.
3. Differentiate root & Rhizome.
4. Differentiate dicot & monocot leaf.
5. Give general anatomical structure of wood & bark with suitable example.

**[05 Marks]**

1. What is dicot stem ? draw diagrammatic section of it, label & describe it in short.
2. What is dicot root ? draw diagrammatic section of it, label & describe it in short.
3. What is dicot leaf ? draw diagrammatic section of it, label & describe it in short.

4. What is monocot root ? draw diagrammatic section of it, label & describe it in short.

## 12. Carbohydrate

### [10 Marks]

- 1) What are carbohydrates? Give detail classification of carbohydrates with suitable examples.
- 2) What are gums mention the collection, preparation, chemical constituents, purity tests and uses of Gum ghatti.
- 3) What are soluble saccharides? With suitable example discuss its preparation, mention chemical constituents, purity test and uses.
- 4) Define honey. Discuss its preparation. Mention its chemical constituents, purity test and uses.
- 5) What are mucilages? Mention the seed drugs containing mucilage. Mention the method of estimation of mucilage and its uses.
- 6) Define carbohydrates. Classify with suitable examples and give test for each.
- 7) What are the carbohydrates ? give special reference to the soluble saccharides, its chemical tests and uses.
- 8) Discuss the adulteration of honey, guduchi satwa, kumai and described the method of their detection.
- 9) What is honey and honey-dew ? mention the uses of honey in ayurveda. Described the adulterant and the tests of their detection.
- 10) Preparation of Aloe.

### [5 Marks]

1. Identify test for mucilage and uses.
2. Identification tests for carbohydrates.
3. Galo satwa.
4. collection, preparation and chemical constituents of karaya gum.
5. Mocharas.
6. Preparation of Karaya Gum.
7. Identity test of babul niryans and its adulterants.
8. Purity test and uses of gum karaya.
9. Extraction, purity test and uses of gum ghatti.
10. Test for identification of mucilage and their uses.
11. Identity test of ghatti gum and its uses.
12. Identification tests for carbohydrates.
13. Mucilage, its estimation and colour tests.
14. Isapgol
15. Laghu & Brihat gokshur



**[2 Marks]**

Give Botanical source, family, parts used and uses of following drugs.

1. Babbula
2. Kokilaksha
3. Brihat gokshura
4. Ashwagol
5. Ghatti gum
6. Kumari
7. Methika
8. Guduchi
9. Chandrashura
10. Karaya gum
11. Mochras
12. Preparation of karaya gum.
13. Identify test for mucilage and uses.
14. Identification tests for carbohydrates.

• **Miscellaneous questions :-**

1. Importance of trichoms and stomata in identification of leaf drugs.
2. Importance of calcium oxalate and epidermal trichoms in detection of crude drugs.
3. Stomatal index and types of stomata.
4. Importance of calcium oxalate and calcium carbonate in identification of crude drugs.
5. Importance of starch grains in identification of crude drugs.