**QUESTION BANK FOR PHARMACOGNOSY AND PHYTOCHEMISTRY-1 THEORY**

**Unit-1**

**Long essays 10 marks**

1. Define Pharmacognosy. Explain the history and Scope of Pharmacognosy.
2. Classify crude drugs. Classify crude drugs on chemical and pharmacological basis State Merits and demerits of Chemical and Pharmacological classification.
3. Classify crude drugs. Explain morphological and sero taxonomical classification.
4. Define evaluation of crude drugs. Discuss the microscopical method evaluation of crude drugs.
5. What is evaluation? Explain Physical method of evaluation of crude drugs.
6. Elaborate on Chemical and Biological method of evaluation.
7. Define Adulteration of crude drugs. Explain the various methods of Adulteration and Detection of adulterants in crude drugs.

**Short essays 5 marks**

1. Explain Quantitative microscopic method in evaluation of crude drugs.
2. List thevarious sources of crude drugs with examples.
3. Differentiate organized and unorganised crude drugs.
4. Define Chemotaxonomy. Classify with examples.
5. Define adulteration. Explain the four methods of adulteration of crude drugs.
6. Explain Organoleptic evaluation of crude drugs with examples.
7. Explain Lycopodiumspore method in evaluation of crude drugs.
8. Explain the Biological evaluation of crude drugs.
9. Define and classify unorganised drugs.
10. Write the determination and significance of Ash value.
11. Write the determination and significance of Extractive values.
12. Explain the different methods to determine the moisture content of crude drugs.
13. Explain the determination of swelling and foaming index of crude drugs.

**Unit-2**

**Long essays 10 marks**

1. Explain the exentric factors affecting the cultivation of Medicinal plants.
2. Define the terms ‘polyploidy’ and ‘mutation’. Explain their applications.
3. Define polyploidy and Hybridization. Explain their applications.

**Short essays 5 marks**

1. Mention the plant hormones and give their applications.
2. Conservation of medicinal plants.
3. Collection and processing of crude drugs with examples.
4. Types of soil and soil fertility.
5. Explain different types of pests and methods used to control them.
6. Storage of crude drugs.
7. Drying methods for crude drugs
8. Define Mutation and give its significance.
9. Explain the methods of cultivation with merits and demerits.

**Short Answers.**

1. Define Garbling in processing of crude drugs.
2. Uses of Gibberllic acid.
3. Types and uses of Auxins as plant growth regulators.
4. Role of Cytokinins as plant growth regulator.
5. What is mulching.
6. Define hybridization and mutation,
7. Define mutation and polyploidy.
8. Coppicing and felling method.
9. Drying methods of crude drugs.
10. Methods of collection of barks.
11. Edaphic factors.
12. What is budding and layering.
13. Biofertilizers.

**UNIT III**

**Short essays**

1. Applications of Plant tissue culture for production of secondary metabolites.
2. General nutritional requirements of Plant tissue culture.
3. Different types plant tissue cultures.
4. Write a note on edible vaccines.
5. Explain the growth curve of Plant tissue culture.

**Short essays**

1. Define totipotency.
2. Organogenesis.
3. Surface sterilization of explant.
4. Growth index.
5. Micro nutritional requirements of PTC.
6. Advantages of PTC.
7. Types of cell suspension cultures.
8. Applications of cell suspension cultures.
9. What are edible vaccines.
10. What is micropropagation.
11. Define explant.
12. What is callus?
13. What are the sources of Carbon and Nitrogen in PTC?

**UNIT IV**

**Long essays**

1. Elaborate on Ayurveda and Homeopathic system of Medicine.
2. Explain the Unani, Siddha and Chinese System of Medicine.
3. Elaborate on Ayurveda and Unani system of Medicine.
4. Define, classify and general chemical tests for Alkaloids.
5. Define, classify and give the properties for Glycosides.
6. Define, classify and write the chemical tests for Tannins.
7. Define, classify and write the Properties of Volatile oils.
8. Define and Classify Resins and Volatile oils.

**Short eaasys**

1. Classify Resins with examples.
2. Explain the chemical test for Anthraquinone and Cardiac glycosides.
3. Short note on flavonoids.
4. Discuss the principle involved in Ayurvedic system of Medicine.
5. Short note on Homeopathic system of medicine.
6. Short note on siddha and Unani System of medicine.
7. Classify Volatile oils.

**Short Answer**

1. Citrus bioflavonoids.
2. Shinoda test.
3. Keller killiani test.
4. Test for tropane alkaloids.
5. Resin combinations.
6. Gold beater’s skin fest.
7. General test for alkaloids.
8. Borntrager’s test.
9. Test for Steroids.
10. Terpeneless volatile oils.
11. Differentiate Cardenólides from Bufadienolides.
12. General chemical tests for tannins.

**Unit 5**

**Short essays**

1. Give the B.S, Chemical nature and uses of Cotton and Jute.
2. Write the B.S, Chemical nature and uses of Jute and Hemp.
3. Write the short note on Natural allergens.
4. Hallucinogens and teratogens.
5. Give the Biological source, Chemistry and method of preparation of Agar.
6. Describe the chemistry of Lipids.
7. Give the Biological source, Chemistry and method of preparation of Beeswax.
8. Give the Biological source, Chemistry and method of preparation of Urokinase.
9. Write the preparation, storage and therapeutic uses of Castor oil.
10. Classify medicinal agents from Marine sources with examples.
11. Give the chemical tests for Acacia and Agar.
12. Give the chemical tests for Gelatin and Tragacanth.
13. Give the Biological source, Chemistry and method of preparation of Papain.
14. Give the Biological source, Chemistry and method of preparation of Bromelain
15. Give the Biological source, Chemistry and method of preparation of streptokinase.
16. Give the Biological source, Chemistry and method of preparation of seratiopeptidase.
17. Give the Biological source, Chemistry and method of preparation of casein.
18. Write a short note on Chaulmoogra oil and wool fat
19. Give the Biological source, Preparation and uses of Honey.
20. Quantitative analysis of fixed oils.

**Short Answer**

1. Feih’s test.
2. Give the Biological source, chemistry of an antileprotic drug.
3. Differentiate Agar from Acacia by chemical tests.
4. Define Primary and secondary metabolites.
5. Mention four proteolytic enzymes.
6. Confirmatory tests for Tragacanth.
7. Confirmatory tests for Gelatin
8. Tests for Castor oil.
9. Teraiogens.
10. Hallucinogens.
11. Name any four anticancer marine drugs.
12. Define proteins and enzymes.
13. Structure of Chaulmoogric acid.
14. Define Acid value.
15. Define Saponification value.
16. Define Rancidity.
17. Name any four anti-inflammatory agents from Marine source.
18. Biological source and uses of Papain.
19. Method of detection of Honey.
20. Tests for Mucilage.
21. Differentiate fats and fixed oils