

Model Question Paper ER 20-13T
Diploma in Pharmacy 1st year
Subject: Pharmacognosy (Theory)

Time: 3 hrs.

Full Marks: 80

Note: Give example and draw diagram wherever necessary

I. Answer the following questions: 20×1=20

1) Answer in one sentence: 10×1=10

- a) Define Pharmacognosy .
- b) State which part of the plant is used in case of (i) Belladonna (ii) Rauwolfia
- c) Write example of pharmaceutical aid obtained from: (i) Animal source (ii) Mineral source.
- d) Mention synonym of the following crude drug: (i) Asafoetida (ii) Liquorice
- e) Give the name of the drug which passes the following chemical test. (i) Vitali-Morin test (ii) Swelling factor test
- f) Name the drug having following microscopical characters (any two) (i) Lignified trichomes (ii) Fibrovascular bundle (iii) Paracytic stomata.
- g) Write the name of the drug which has following use: (i) Dental analgesic (iii) Brain tonic
- h) Define Palisade ratio.
- i) Write the biological source of Digitalis.
- j) Define Nutraceuticals.

2) Answers all the questions: 5×1=5

- a) Name of the drug which contain oleo gum resin?
i) garlic ii) ginger iii) myrrh iv) nux vomica
- b) Which part of the Plant is used as a drug in Cardamom?
i) Dried flowering tops ii) Dried roots iii) Dried sclerotium iv) Dried ripe fruits and seeds
- c) Characteristic features of Umbelliferous fruits-
 - i) two mericarp join together by a thread like structure called as carpophores
 - ii) primary ridges are 5 or more runs from apex to base
 - iii) all umbelliferous fruits contain volatile oil
 - iv) all of the above
- d) Name of the drug which contain reserpine- i) Rauwolfia ii) Gokhru iii) Fennel iv) Acacia
- e) Fractured surface of the drug, if treated with sulphuric acid, forms red or reddish-brown colour. The drug should be-
i) Asafoetida ii) gelatin iii) turmeric iv) rhubarb

3) Answers all the questions: 5×1=5

- a) _____ is found to contain **ferulic acid**.
- b) _____ drug is obtained from definite anatomic parts of the plants such as flowers, leaves, fruits etc.
- c) _____ coined the term 'Pharmacognosy'.

- d) _____oil is evaporated at room temperature.
 e) _____ consists of peeled and dried rhizomes and roots of *Rheum officinale*, family Polygonaceae.

II. Short answer type questions (Answer any 10 out of 11):

10×3=30

- Explain chemical method of classification of crude drug with its merit and demerit
- Define Glycosides. Classify it on the basis of Glycosidic linkage with example.
- Write the synonyms, biological source, chemical constituents of 'Gokhru' OR 'Gymnema'.
- Write the method of cultivation and collection of 'Rauwolfia'.
- Explain with example (any two)
 (i) Stomatal Index (ii) Optical rotation (iii) Organoleptic method of evaluation.
- Describe the different techniques (any three) for isolation of volatile oils.
- Draw a well labeled diagram of T. S of cinnamon bark and describe any four microscopical characters.
- Write the chemical constituents and uses of the following drug- (any two)
 (i) Cinchona (ii) Sandalwood oil (iii) Ephedra
- Explain with example of the following: (any two)
 (i) Probiotics (ii) Condensed tannin (iii) Characteristics of umbelliferous fruit.
- Explain the general chemical test for the identification of alkaloids.
- Enlist the Indigenous system of medicine. Describe the 'Siddha system of medicine'.

III. Long answer type questions (Answer any 6 out of 7):

6×5=30

- Define Enzymes. Write the biological source, chemical constituents and uses of 'Papaya'. **1+4**
- Define 'Drug Adulteration'. Describe any three methods of adulteration with suitable example. **1+4**
- Describe the method of preparation of fibre obtained from plant source.
- 1) Define the following with example. (i) Oxytocics (ii) Cardiotonics (iii) Antitussive (iv)Astringents.
 2) Differentiate between organized and unorganized crude drug. **2+3**
- Explain the chemical tests of any FIVE crude drugs: **5×1**
 i) Datura ii) Benzoin iii) Nux- Vomica iv) Shark liver oil v) Glatin vi) Starch
- 1) Write examples of drug belonging to following family- (i) Rubiaceae (ii) Apocynaceae (iii) Burseraceae (iv) Liliaceae
 2) Write official requirements of surgical dressings.
 3) Describe morphological characters of clove with diagram. **2+1.5+1.5**

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