

**B. PHARM.
FIFTH SEMESTER
PHARMACOGNOSY & PHYTOCHEMISTRY-II
BP504T**

**SET
B**

[USE OMR FOR OBJECTIVE PART]

Full Marks : 75

Duration : 3 hrs.

(PART-A: Objective)

Marks : 20

1×20=20

Time : 30 min.

Choose the correct answer from the following:

1. Digoxin is a
 - a. Anthraquinone glycoside
 - b. Cardiac glycoside
 - c. Bitter glycoside
 - d. Alkaloid
2. The full form of HPLC is?
 - a. High Performance Liquid Chromatography
 - b. Highest Performance Level Chromatography
 - c. High Performance Liquid Solid Chromatography
 - d. None of the above
3. Sennoside is a
 - a. Resin
 - b. Alkaloid
 - c. Tannin
 - d. Glycoside
4. Vincristine & Vinblastine belongs to which species?
 - a. Catharanthus roseous
 - b. Curcuma longa
 - c. Thea sinensis
 - d. Artemisia annua
5. Podophyllotoxin is a
 - a. Resin
 - b. Alkaloid
 - c. Glycoside
 - d. Flavonoid
6. Reserpine is used to treat?
 - a. High blood pressure
 - b. Ovarian cancer
 - c. Osteoporosis
 - d. Kidney Stones
7. Curcumin are compounds obtained from?
 - a. Leaves
 - b. Bark
 - c. Stolons
 - d. Rhizomes
8. Liebermann-Burchard's test is for?
 - a. Glycosides
 - b. Reserpine
 - c. Steroids
 - d. Caffeine
9. Which of the following is a Volatile oil containing drug?
 - a. Mentha
 - b. Clove
 - c. Coriander
 - d. All of the above

10. The Biological Source of Asafoetida is?
 - a. Oleo gum resin of rhizomes and roots
 - b. Oleo gum resin of bark
 - c. Oleo gum resin of leaves
 - d. All of the above
11. What is the Scientific name of Clove?
 - a. *Eugenia caryophyllus*
 - b. *Eugenia vulgaris*
 - c. *Ferula caryophyllus*
 - d. *Eugenia sinensis*
12. Galenical is a term used for....
 - a. Extract
 - b. Menstruum
 - c. Solvent
 - d. Marc
13. The chief constituent of Fennel is....
 - a. D-Fenchone
 - b. Theophylline
 - c. Mannitol
 - d. Aloin
14. The higher affinity of analyte towards stationary phase in Chromatography indicates...
 - a. Slower Movement Rate
 - b. No Movement Rate
 - c. Higher Movement Rate
 - d. Doesn't depend upon Movement Rate
15. The chemical responsible for sweetness in Cinnamon is...
 - a. Aloin
 - b. Cinnamylaldehyde
 - c. Cinnamic acid
 - d. Mannitol
16. The full form of DAHP synthase is....
 - a. 3-Deoxy-D-arabinoheptulosonate-7-phosphate-synthase
 - b. 3-Deoxy-D-arabinoheptulosonate-phosphate-synthase
 - c. 2-Deoxy-D-arabinoheptulosonate-7-phosphate-synthase
 - d. 4-Deoxy-D-arabinoheptulosonate-7-phosphate-synthase
17. Phosphoenolpyruvate is an intermediate product of....
 - a. Glycolysis
 - b. Pentose Phosphate Pathway
 - c. Gluconeogenesis
 - d. All of the above
18. Shikimic acid is isolated from the Japanese flower....
 - a. *Illicium anisatum*
 - b. *Catharanthus roseus*
 - c. Japanese camelia
 - d. Japanese wisteria
19. Shikimic acid pathway is applied by....
 - a. Plants and Animals
 - b. Plants and Microorganisms
 - c. Only Plants
 - d. Only Microorganisms
20. Erythrose-4-Phosphate is an intermediate product of....
 - a. Pentose Phosphate Pathway
 - b. Gluconeogenesis
 - c. Glycolysis
 - d. Kreb's Cycle

(PART-B: Descriptive)

Time : 2 hrs. 30 min.

Marks : 35

[Answer any seven (7) questions]

1. Write down the different steps involved in radioactive tracer technique? 5
2. Describe the applications of Spectroscopic techniques in Pharmacognosy? 5
3. Explain the Soxhlet Extraction Technique with Diagram? 5
4. Explain the Differences between Paper Chromatography and Thin Layer Chromatography? 5
5. Give the scientific names of the following drugs: 5
 - a. Rauwolfia
 - b. Vinca
 - c. Benzoin
 - d. Colophony
 - e. Senna
6. Write down the synonym, biological source, chemical constituents and uses of Artemisinin. 5
7. Explain the Isolation, Identification and Analysis of the following drugs: 2.5+2.5=5
 - a. Clove
 - b. Coriander
8. Define the following extraction terminologies: 2.5+2.5=5
 - a. Galenical
 - b. Marc
 - c. Menstruum
 - d. Crude Drug
 - e. R_f value
9. Why Extraction is important? Explain Percolation with diagram. 5

PART-C : Long type questions

[Answer any two (2) questions]

1. Elaborate Shikimic acid pathway with complete chemical reaction along with its significance in the biosynthesis of secondary metabolites. 10
2. Write a detailed note on Glycosides and any two Glycoside containing drugs. 10
3. Write the Industrial Production, Estimation and Uses of the following Drugs: 10
 - a. Forskolin
 - b. Sennosides
 - c. Caffeine

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