REV-03
BPH/13/38/13

2023/12

SET B

B. PHARM.
FIFTH SEMESTER
PHARMACOGNOSY & PHYTOCHEMISTRY-II
BP504T
[USE OMR FOR OBJECTIVE PART]

Duration : 3 hrs. **Full Marks : 75**

PART-A: Objective

Time : 30 min. **Marks : 20**

Choose the correct answer from the following: ***1×20=20***

1. Vincristine & vinblastine belongs to which species?
   a. Catheranthus roseous
   b. Curcuma longa
   c. Thea sinnesis
   d. Artemisia annua

2. Shinoda test is done for?
   a. Atropine
   b. Reserpine
   c. Rutin
   d. Caffeine

3. Curcumin are compounds obtained from?
   a. Leaves
   b. Bark
   c. Stolons
   d. Rhizomes

4. Reserpine is used to treat?
   a. High blood pressure
   b. Ovarian cancer
   c. Osteoporosis
   d. Kidney Stones

5. Coleous torskolii belongs to which family?
   a. Rubiaceae
   b. Lamiaceae
   c. Apocynacea
   d. Leguminoseae

6. Sennoside is a
   a. Resin
   b. Alkaloid
   c. Tannin
   d. Glycoside

7. Podophyllotoxin is a
   a. Resin
   b. Alkaloid
   c. Glycoside
   d. Flavonoid

8. Digoxin is a
   a. Anthraquinone glycoside
   b. Cardiac glycoside
   c. Bitter glycoside
   d. Alkaloid

9. Atropine is identified by which chemical test
   a. Lead acetate test
   b. Shinoda Test
   c. Vitalin Morin test
   d. Murexide Test

10. How many aromatic amino acid are derived from shikimate pathway
    a. 4 b. 3
    c. 2 d. 1

11. Galenical is a term used for....
    a. Extract b. Menstruum
    c. Solvent d. Marc

12. Which of the following is not a quantitative chromatographic technique?
    a. Column Chromatography b. Paper Chromatography
    c. High Performance Liquid Chromatography d. Thin Layer Chromatography

13. The higher affinity of analyte in Chromatography indicates...
    a. Slower Movement Rate b. No Movement Rate
    c. Higher Movement Rate d. Doesn't depend upon Movement Rate

14. R_f is useful in.....
    a. Chromatoraphy b. Fractionation
    c. Isolation d. All of the above

15. Quinoline alkaloids are biosynthesized via which one of the following pathways...
    a. Shikimic acid-tyrosine b. Shikimic acid-phenylalanine
    c. Shikimic acid-tryptophan d. Shikimic acid-cathonine

16. Phosphoenolpyruvate is an intermediate product of....
    a. Glycolysis b. Pentose Phosphate Pathway
    c. Gluconeogenesis d. All of the above

17. Shikimic acid is isolated from the Japanese flower....
    a. Illicium anisatum b. Catharanthus roseus
    c. Japanese camelia d. Japanese wisteria

18. Shikimic-3-Phosphate is coupled with..... to form 5-enol pyruvyl shikimate-3-phosphate.
    a. Chorismic acid b. Prephanic acid
    c. Phosphoenol pyruvate d. 3-dehydroquinic acid

19. Thallaquine test is done for?
    a. Podophyllotoxin b. Quinine
    c. Curcumin d. Atropine

20. Shikimic acid pathway is applied by....
    a. Plants and Animals b. Plants and Microorganisms
    c. Only Plants d. Only Microorganisms

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 Chromatographic techniques in Pharmacognosy?	5
3.	Explain the Soxhlet Extraction Technique with Diagram?	5
4.	What is Rf Value? Explain the Differences between Paper Chromatography and Thin Layer Chromatography?	5
5.	Explain Column Chromatography with diagram.	5
6.	Write down the synonym, biological source, chemical constituents and uses of Digitalis.	5
7.	Write down the biological source, analysis, properties and uses Menthol.	5
8.	Write down the biological source, analysis, properties and uses Curcumin.	5
9.	Write down the biological source with structure, estimation and utilization of Forskolin	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 Detail note on Quinine. 10

3. What are Alkaloids? Write down the synonym, bioresource, chemical constituents, therapeutic uses and commercial applications of Belladonna, Rauwolfia and Vinca. 10

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