

B. Pharm. (CBCS Pattern) Semester-V  
**BP504T - Pharmacognosy and Phytochemistry-II**

P. Pages : 3

Time : Three Hours



**GUG/S/25/13182**

Max. Marks : 75

Note : All questions are compulsory.

**1. Multiple Choice Questions:**

**20x1  
=20**

- i) Family of Fennel is-
  - a) Labiatae
  - b) Lauraceae
  - c) Umbelliferae
  - d) Rutaceae
- ii) ----- is known as Vitamin-P.
  - a) Caffeine
  - b) Rutin
  - c) Shikimik acid
  - d) Menthol
- iii) Citral is -----
  - a) Glycoside
  - b) Alkaloid
  - c) Terpenoid
  - d) Tannin
- iv) Forskolin is a -----
  - a) Resin
  - b) Volatile oil
  - c) Glycoside
  - d) Diterpene
- v) Amino acid pathway start with -----.
  - a) Acetyl-Co-A
  - b) Oxaloacetic acid
  - c) Zinc
  - d) Nitrogen
- vi) Tyrosine is biosynthesized through which pathway?
  - a) Acetate mevalonate
  - b) Acetate malonate
  - c) Shikimik
  - d) None
- vii) ----- is not used in biosynthetic pathway study.
  - a)  $^{12}\text{C}$
  - b)  $^{32}\text{P}$
  - c)  $^{18}\text{O}$
  - d)  $^2\text{H}$
- viii) Major constituent of liquorice is -----
  - a) Glycerine
  - b) Glycine
  - c) Glycozen
  - d) Glycyrrhizin
- ix) Major active constituents of aloe are -----
  - a) Anthraquinone
  - b) Alkaloid
  - c) Terpenoids
  - d) Resins
- x) Botanical name of vinca is-
  - a) Acacid arabica
  - b) Glycyrrhiza glabra
  - c) Periwinkle
  - d) Catharanthus roscus

- xi) Reserpine is a -----
  - a) Tropane
  - b) Indole
  - c) Quinoline
  - d) Terpene
- xii) Medicinally useful part of Gentian is -----
  - a) Roof
  - b) Stem
  - c) Leaf
  - d) Flower
- xiii) Curcuma longa belong to family-
  - a) Liliaceae
  - b) Myrtaceae
  - c) Zingiberaceae
  - d) Rutaceae
- xiv) Botanical name of Ginger is -----
  - a) Resin
  - b) Volatile oil
  - c) Gingerol
  - d) Zingiber officinale
- xv) Catechu belong to which of following class of crude drugs?
  - a) Mineral
  - b) Tannins
  - c) Resin
  - d) Alkaloid
- xvi) Medicinally useful part of senna is -----
  - a) Leaf
  - b) Flower
  - c) Seed
  - d) Roof
- xvii) Cardiovascular disease is treated with -----
  - a) Glycyrrhiza
  - b) Digitalis
  - c) Mentha
  - d) None
- xviii) Taxol is used for treatment of -----
  - a) Hypertension
  - b) Fever
  - c) Carcinoma
  - d) Diabetes
- xix) Mayer's test is used for identification of -----
  - a) Terpenoids
  - b) Alkaloids
  - c) Flavonoids
  - d) Tannins
- xx) Goldbeater's skin test is used for identification of -----
  - a) Tannins
  - b) Alkaloids
  - c) Glycosides
  - d) Flavonoids

**2.** Long answer question (Solve **any two**)

$$2 \times 10 = 20$$

- i) Write in detail isolation, identification and analysis of menthol.
- ii) Write in detail about shikimic acid pathway.
- iii) Write in detail with examples chemical classification of Alkaloids.

**3. Short answer question (Solve **any seven**)**

**7x5  
=35**

- i) Write definition of Tannins, Terpenoids, Resins, Glycosides, Phenylpropanoids.
- ii) Write biological source of Bitter Almond, Gentian, Pterocarpus, Dioscorea, Mentha.
- iii) Explain role of chromatography in isolation and identification of crude drugs.
- iv) Write steps of Amino acid pathway.
- v) Write in brief on use of radioactive isotopes in investigation of biogenetic studies.
- vi) Write biological source, chemical composition and therapeutic uses of myrrh.
- vii) Write biological source of Forskolin, Rutin, Curcumin, Artemisin, Atropine.
- viii) Mention different classes of Phenylpropanoids with examples.
- ix) Write in short any two methods for extraction of volatile oil.

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