

Programme: B. Pharm

Course: Pharmacognosy & Phytochemistry II

Course Code: BP504T

Enrolment no. \_\_\_\_\_

Full Marks: 75

Time: 3 Hrs.

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks
<b>Section I</b>				
1	<b>Objective Type Questions</b>			
	<p>i. Isapgol seeds are used as: a. Laxative b. Purgative c. Cathartic d. Digestive</p> <p>ii. Ruthenium Red is used to detect: a. Gum b. Lipids c. Wax d. Mucilage</p> <p>iii. The Keller-Kiliani test is identification test used for: a. Digitalis b. Clove c. Fennel d. Senna</p> <p>iv. Digitalis is mainly used as: a. Analgesic b. CNS Stimulant c. Cardiotonic d. Purgative</p> <p>v. Soxhlet apparatus is mainly used for: a. Filtration b. Clarification c. Extraction d. Size reduction</p> <p>vi. Tannic acid is an antidote in .....poisoning: a. Iodine b. Cyanide c. Alkaloids d. Arsenic</p> <p>vii. Condensed tannins are called as: a. Hydrolysable tannin b. Non-hydrolysable tannin c. Pseudotannins d. Prototannins</p> <p>viii. The active ingredient that forms froth when shaken with water. a. Alkaloid b. Tannin c. Gum d. Saponins</p> <p>ix. Belladonna belongs to the family of: a. Solanaceae b. Piperaceae c. Papavaraceae d. Rutaceae</p> <p>x. A crude drug used as cardiotonic: a. Dhatura b. Cinchona c. Ephedra d. Ergot</p> <p>xi. Synonyms of Opium is a) Kas-kas b) Raw opium c) White poppy d) all of the above</p> <p>xii. Flavonoids are biosynthetically derived from a) Shikimic acid pathway b) Mevolonic acid pathway c) Acetate pathway d) None of the above</p> <p>xiii. Steroidal saponins are biosynthesized via a) Shikimic acid pathway b) Mevalonic acid pathway c) Aceto-Acetate pathway d) Calvin's cycle</p> <p>xiv. Saponin glycoside shows one of the following property a) Laxative b) Astringent c) Foaming d) Anticonvulsant</p> <p>xv. Fenchole is important constituents of a) Coriander b) Fennel c) Clove d) Ajwon</p> <p>xvi. Number of isoprene unit present in diterpenes a) 2 b) 3 c) 4 d) 5</p> <p>xvii. In case of ginger which part is used as medicine a) Stem b) Rhizomes c) Leaves d) Bark</p> <p>xviii. Vinca comes under which alkaloid a) Tropane b) Indole c) Purine d) Quinolone</p> <p>xix. Precursor for the biosynthesis of tropane alkaloids is: a) Ornithine b) Tyrosine c) Leucine d) Lysine</p> <p>xx. Synonym of Vinca is: a. Sadabahar b. Sarpagandha c. Opium d. Mentho</p>	CO1	Remember	1 x 20 = 20
<b>Section II</b>				
<b>2. Short Answer type questions.</b>				
a	Mention the role of Shikimic Acid Pathway.	CO1	Remember	7 x 5 = 35
b	Discuss the general introduction, chemical constituents, bio sources, therapeutic uses and applications of Ginger.	CO2	Remember	
c	Explain in detail about the general introduction, chemical constituents, bio sources, therapeutic uses and applications of Dioscorea.	CO2	Remember	
d	Diagrammatically explain the hydro distillation technique.	CO3	Understand	
e	Describe the method of industrial production of podophyllotoxin.	CO4	Understand	
f	Mention the advantages and disadvantages of paper chromatography.	CO5	Remember	

	or			
	Explain in detail about super critical fluid extraction.	CO5	Understand	
g	Explain in detail about the industrial production of forskolin.	CO4	Understand	
	or			
	Describe the alcoholic extraction method of diosgenin.	CO4	Understand	
<b>Section III</b>				
<b>Long Answer Type questions</b>				
3	Explain in detail about Isolation, Identification and Analysis of Menthol.	CO3	Analyze	<b>2 x 10 = 20</b>
	or			
	Explain in detail about Isolation, Identification and Analysis of Atropine.	CO3	Analyze	
4	Elaborate in detail about the principle, instrumentation and industrial applications of HPLC.	CO5	Evaluate	
	or			
	Explain in detail about the principle, components and industrial applications of UV visible	CO5	Evaluate	

**Course Outcomes (CO):**

CO1: To understand the basic metabolic pathways for synthesis of metabolites.

CO2: To carry out isolation and identification of Phyto-constituents.

CO3: To understand the herbal drug interactions.

CO4: To understand the preparation and development of herbal formulation.

CO5: To know the modern extraction techniques, characterization and identification of the herbal drugs and Phyto-constituents.