

Name:	
Enrolment No:	

UPES
End Semester Examination, December 2024

Course: Pharmacognosy and Phytochemistry II
Program: B. Pharm
Course Code: BP504T

Semester : V
Duration : 03 Hours
Max. Marks: 75

Instructions: Draw neat, labelled diagrams wherever necessary

SECTION A
(20Qx1M=20 Marks)

S. No.		Marks	COs
Q1	Define special isoprene rule.	1	CO1
Q 2alkaloid is obtained from the amino acid tyrosine. a. Morphine b. Ephedrine c. Both a and b d. None of the above	1	CO1
Q 3	Chemical constituent of rauwolfia is..... a. Tropane alkaloid b. Indole alkaloid c. Quinoline alkaloid d. Phenanthrene alkaloid	1	CO2
Q 4	Identification test for tropane alkaloids is a. Tannic acid test b. Vitali morin test c. Goldbeaters skin test d. Bontrager's test	1	CO2
Q 5	Draw the structure of mevalonic acid.	1	CO1
Q 6	Enumerate the difference between Bontrager's and modified Bontrager's test.	1	CO2
Q 7	Biological source of ginger is..... a. Whole plant b. Root c. Leaf	1	CO3

	d. Rhizome		
Q 8	The nature of trichomes in digitalis powder is..... a. Unicellular warty covering trichomes b. Multicellular glandular trichomes c. Unicellular lignified trichomes d. None of the above	1	CO3
Q 9	TLC is based on a. Adsorption b. Partition c. Both a and b d. none of the above	1	CO5
Q 10chemical test magnesium turnings are added a. Shinoda test b. Keller kiliani test c. Both the a and b d. None of the above	1	CO2
Q 11	Citral is a monoterpene aldehyde obtained from..... a. Lemongrass oil b. Clove oil c. Cinnamon oil d. None of the above	1	CO4
Q 12	Glycyrrhetic acid is used obtained from a. Senna b. Ginger c. Myrrh d. Licorice	1	CO4
Q 13	Digoxin is used as..... a. Laxative b. antimalarial c. Cardioprotective d. All of the above	1	CO4
Q 14	Recall the biological source of Taxol.	1	CO3
Q 15	Identify and describe the type of oil gland found in clove.	1	CO3
Q 16	Fennel oil is obtained from vittae of fruits of <i>Coriandrum sativum</i> - true/false	1	CO3
Q 17	Bontrager's test is performed for..... a. O-glycosides b. Tropane alkaloids c. All of the above d. None of the above	1	CO2
Q 18	Draw the structure of trichomes present in senna.	1	CO1
Q 19	Menthol is a natural terpenoid that follow isoprene rule-true/false	1	CO1
Q 20	Enfleurage method is used to isolate volatile oil from..... a. Flowers	1	CO3

	b. Leaves c. Stems d. Citrus peels		
SECTION B (20 Marks) (2Qx10M=20 Marks)			
	Attempt 2 Question out of 3		
Q 1	Explain in detail the Shikimic acid pathway with suitable examples.	10	CO1
Q 2	Organize the pharmacognostical scheme of digitalis with suitable diagrams.	10	CO2
Q 3	Elaborate the isolation, identification and analysis of menthol and curcumin.	10	CO5
SECTION-C (35 Marks) (7Qx5M=35 Marks)			
	Attempt 7 Question out of 9		
Q 1	Compare and contrast different types of aloes.	5	CO2
Q 2	Enumerate the steps involved in tracer techniques and explain in detail incorporation of labelled compounds.	5	CO1
Q 3	Discuss the biological source, chemical constituents and uses of catechu and benzoin.	5	CO3
Q 4	Describe the isolation and characterization of caffeine.	5	CO5
Q 5	List the modern methods extraction of phytoconstituents and write a note on ion exchange chromatography.	5	CO5
Q 6	Describe the morphological and microscopical characteristics of cinnamon in detail.	5	CO3
Q 7	Explain the industrial production and estimation of Vincristine and Vinblastine.	5	CO4
Q 8	Underline the significance of opium alkaloids.	5	CO4
Q 9	Recall the biological source, chemical constituents and uses of podophyllum and dioscorea.	5	CO2