Name: **Enrolment No:**	UPES UNIVERSITY OF TOMORROW

UPES

End Semester Examination, December 2023

Course: B. Pharmacy **Semester : V**

Program: PHARMACOGNOSY AND PHYTOCHEMISTRY II **Duration : 03 Hours**

Course Code: BP504T **Max. Marks: 75**

Instructions: DRAW NEAT LABELLED DIAGRAMS WHEREVER NECESSARY

SECTION A

(20Qx1M=20 Marks)

S. No.		Marks	COs
Q 1	Basic metabolic pathway of terpenoids is 1. Shikimic acid pathway 2. Acetate mevalonic acid pathway 3. Amino acid pathway 4. None of the above	**1**	**CO1**
Q 2	Write the biological source of fennel.	**1**	**CO2**
Q 3	Biological source of clove is 1. Flowers 2. Dried stems 3. Twigs 4. Flower buds	**1**	**CO2**
Q 4	Murexide test is the identification test for 1. Caffeine 2. Digoxin 3. Atropine 4. Sennoside A	**1**	**CO3**
Q 5	Write true or false: keller-kiliani test is the identification test for cardiac glycosides.	**1**	**CO3**
Q 6	Senna glycosides have --------linkage 1. C-linkage 2. O-linkage 3. N-linkage 4. S-linkage	**1**	**CO3**
Q 7	*Zingiber officinalis* mainly contain 1. Oleo resins 2. Resins 3. Alkaloids 4. Volatile oil	**1**	**CO4**

Q 8	What are radioactive isotopes.	**1**	**CO1**
Q 9	Citral is isolated from. 1. *Mentha piperita* 2. *Cymbopogon flexuosus* 3. *Artemisia annua* 4. *Commiphora mol mol*	**1**	**CO3**
Q 10	Define chromatography.	**1**	**CO2**
Q 11	Rutin is a ---------- 1. Alkaloid 2. Glycoside 3. Flavonoid 4. Tannin	**1**	**CO4**
Q 12	Volatile oil is obtained from ---------- 1. Vasaka 2. Vinca 3. Senna 4. Fennel	**1**	**CO3**
Q 13	Shikimic acid pathway is the biogenetic pathway of alkaloids- True or false	**1**	**CO1**
Q 14	Clevenger's apparatus is used for extraction of 1. Glycosides 2. Volatile oils 3. Alkaloids 4. Tannins	**1**	**CO2**
Q 15	Medicinal property of artemisin is 1. Antihypertensive 2. Antitussive 3. Antimalarial 4. Analgesic	**1**	**CO4**
Q 16	Chemical classification of myrrh is 1. Iridoids 2. Resins 3. Glycosides 4. Terpenoids	**1**	**CO4**
Q 17	HPTLC is an important sophisticated technique for -----of herbal drugs. 1. Identification 2. Estimation 3. Both 1 and 2 4. None of the above	**1**	**CO5**

Q 18	Principle behind soxhlet extraction is-----	**1**	**CO3**
Q 19	Gel permeation chromatography follows. 1. molecular size of the compounds 2. pore size of the gel 3. Both 1 and 2 4. None of the above	**1**	**CO5**
Q 20	What is the biological source of Curcumin?	**1**	**CO1**
SECTION B (20 Marks) **(2Qx10M=20 Marks)** **Attempt 2 Question out of 3**			
Q 1	Explain in detail acetate mevalonic acid pathway.	**10**	**CO1**
Q 2	Describe in detail the pharmacognostical report of Coriander.	**10**	**CO3**
Q 3	Discuss the biological source, chemical constituents and uses of Opium, myrrh, gentian and cinnamon.	**10**	**CO3**
SECTION-C (35 Marks) **(7Qx5M=35 Marks)** **Attempt 7 Question out of 9**			
Q 1	Briefly describe the significance of radioactive isotopes.	**5**	**CO1**
Q 2	Briefly explain with neat, labelled diagrams morphological and microscopical characteristics of senna	**5**	**CO2**
Q 3	Discuss the biological sources and uses of quinine and reserpine.	**5**	**CO3**
Q 4	Explain the industrial production and uses of Caffeine.	**5**	**CO4**
Q 5	Briefly explain the types of electrophoresis in the isolation of constituents.	**5**	**CO5**
Q 6	Explain in brief glycosides with suitable examples.	**5**	**CO2**
Q 7	Explain the methods of isolation of volatile oils.	**5**	**CO3**
Q 8	Briefly explain the biological source, chemical composition, and uses of benzoin.	**5**	**CO4**
Q 9	Indicate the importance of spectroscopy in isolation and characterization of phytoconstituents.	**5**	**CO5**