	Sanjay Ghodawat University, Kolhapur Established as State Private University under Govt. of Maharashtra. Act No XL, 2017	Winter 2023 EXM/P/09/00
Year and Program **T.Y.B.Pharm (23-24)**	**School of Pharmaceutical Sciences**	**Department : Pharmacy**
Course Code :BP504T	**Course Title : Pharmacognosy and Phytochemistry II**	**Semester – V**
Date: 27/12/2023 **Day : Wednesday** **Time: 10.30 to 1.30 PM**	**Examination: End Semester**	**Max Marks: 75**

Instructions: 1) All questions are necessary.

2) Figures to right indicate full marks.

		Marks	Bloom's Level	CO
Q.1	Objective Type Questions (10x2)	**20**		
a)	End products of shikimic acid pathway are a) Fatty acid b) Acetic acid c) Aromatic amino acid d) None of the above	1	1	1
b)	Which of the following test is used for identification of Anthraquinone glycosides a) Borntragers Test b) Mayers Test c) Fecl3 Test d) All of the above	1	1	3
c)	Which one of the following is an extraction technique for crude drugs a) Maceration b) Soxhlation c) Decoction d) All of the above	1	1	5
d)	RF value means a) Recovery Factor b) Residual Factor c) Retention Factor d) Remaining Factor	1	1	5
e)	Starting material used in acetate pathway a) Acetic acid b) Acetyl coenzume A	1	1	1

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c) Acetyl Pyruvate
d) None of the above

f)	Digitalis plant used against a) CHF b) Diuretic c) Hypoglycemic d) Arrhythmia	1	1	2
g)	Senna plant used as a) Purgative b) Antihypertensive c) Hypoglycemic d) Anti arrhythmic	1	1	2
h)	Which one of the following comes under the category of Volatile oil a) Digitalis b) Vinca c) Fennel d) Catechu	1	1	2
i)	Glycosides are a) Nitrogen containing compounds b) Contains hetrocyclic ring c) Suger containing compounds d) None of the above	1	1	3
j)	Basic unit of hydrolysable tannins is a) Gallic acid b) Flavonoid c) Both A & B d) None of the above	1	1	2
k)	Fatty acids are end product of which of the following metabolic pathway a) Shikimic acid pathway b) Acetate malonate pathway c) Acetate mavalonate pathway d) All of the above	1	1	1
l)	"Eugenol" is an chemical constituent present in which of the following plant a) Senna b) Clove c) Aloe d) Tannin	1	1	2
m)	Which of the following is an identification tests used for alkaloids	1	1	3

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a) Gold beater skin test
b) Fecl3 test
c) Dragondorff test
d) None of the above

n) H.P.L.C Stands for 1 1 5

a) High potency liquid chromatography

b) High resolution liquid chromatography

c) High performance liquid chromatography

d) All of the above

o) Vincristine is utilized as 1 1 4

a) Anticancer
b) Antihypertensive
c) Hypoglycemic
d) Synthesis of steroidal drugs

p) Which one of the following is a principal of Chromatography? 1 1 5

a) Size reduction
b) Drying
c) Partition coefficient
d) Evaporation

q) Diosoenin is utilized as 1 1 4

a) Cancer
b) Antihypertensive
c) Hypoglycemic
d) Synthesis of steroidal drugs

r) IR spectroscopy used for 1 1 5

a) Drying of organic compounds
b) Identification of organic compounds
c) Heating of organic compounds
d) All of the above

s) Gas chromatography used for separation and identification of 1 1 5

a) Non volatile compounds
b) Volatile Compounds
c) Both A & b
d) None of the above

t) Acetate mevalonate pathway leads to the formation of 1 1 1

a) Alkaloids
b) Terpenoids
c) Fatty acids

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d) None of the above.

Q.2		Long Answers (Answer 2 out of 3)	**20**		
	a)	Discuss biological source, isolation, identification analysis method and therapeutic uses for Caffine.	10	2	3
	b)	Illustrate following crude drugs with respect to biological source, family, chemical constituent, microscopy and therapeutic uses 1) Digitalis 2) Fennel	10	3	2
	c)	Illustrate following analytical techniques used for separation, purification and identification of crude drugs a) Chromatography b) Spectroscopy	10	2	5
Q3		Short Answers (Answer 7 out of 9)	**35**		
	a)	Discuss radiotracer technique in the investigation of biogenetic studies.	05	2	1
	b)	Discuss note on "Tannins"	05	2	3
	c)	Describe "Vinca plant" in brief.	05	2	2
	d)	Describe pharmacognosy of "Senna plant" in brief.	05	2	2
	e)	Illustrate T.L.C techniques in brief.	05	3	5
	f)	Discuss various extraction techniques of used for crude drugs.	05	2	5
	g)	Discuss Industrial production, estimation and utilization of Sennosides..	05	2	4
	h)	Discuss IR Spectroscopy techniques in identification of crude drugs	05	2	5
	i)	.Describe Shikimic acid pathway in brief.	05	2	1

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