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Pharmaceutical Technology
Brainware University
Barasat, kolkata-700125

BRAINWARE UNIVERSITY

Term End Examination 2024-2025 Programme – B.Pharm-2020/B.Pharm-2021/B.Pharm-2022 Course Name – Pharmacognosy and Phytochemistry II Course Code - BP504T (Semester V)

Full Marks: 75

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A (Multiple Choice Type Question) 1 x 20=20 1. Choose the correct alternative from the following: (i) Choose the correct answer: lemon grass oil is used as a) Sedative b) Source of Vit. A c) Antiseptic d) Diuretic (ii) Select the correct answer: The main chemical constituent of Cinchona ledegriana is expressed as a) Caffeine b) Quinine c) Curcumin d) Rutin (iii) Estimation of Forskolin by HPLC is done at wavelength. a) 220nm b) 500nm c) 495nm d) 254nm (iv) The family of Digitalis purpurea expressed as ___. a) Apocynaceae b) Moraceae c) Til aceae d) Scrophulariaceae (v) Which method is preferred in plants in which roots are sites of biosynthesis? a) Root feeding b) Stem feeding c) Leaf feeding d) None (vi) Identify the secondary metabolite. a) Alkaoids b) Carbohydrates c) Fats d) Protein (vii) Select the common link between Pentose phosphate pathway and Pyruvate. a) Secondary carbon metabolism b) Primary carbon metabolism c) Tertiary carbon metabolism d) None

(viii) Choose, which of the following is not falling und	er benzoisoquinoline category.	
	a) Thebaine c) Narceine	b) Noscapeine d) Papavarine	
(ix)	Select Marquis test is useful for detection of		
	a) Meconic Acid	b) Thebaine	
(x)	c) Morphine Select the precursor of tryptophan.	d) Papavarine	
(xi)	a) Dehydroquinic acid c) Shikimic acid Choose from the following, conversion of Phospl phosphate to 2-keto3- deoxy-7- phosphoglucohe	b) Prephenic acid d) Anthranilic acid noenolpyruvate and erythrose-4-	.
	using	profile acid is performed	25
(vii)	a) DAHP synthase c) DHQ synthase Indicate, conversion of NH3 to NO2- to NO3- is the	b) DAHP reductase d) DHQ reductase ne process of b) Nitrogen fixation d) Deamination b) cyanogenetic d) steroidal	Brainware University Brasat, Kolkata-70012
(A)1)	a) Nitrification	ne process of b) Nitrogen fixation	3 6 8
/:::	c) Nitrogen assimilation	d) Deamination	inwe at. K
(XIII	Sennosides aretype of glycoside.	hV average and a	Sea Sea
	a) cardiac c) anthraquinone	b) cyanogenetic d) steroidal	8
(xiv) Identify the correct answer: the shikimic acid par biosynthesis of:		
	Amino acids and fatty acids	b) Fatty acids and nucleotides	
	 c) Aromatic amino acids and secondary metabolites 	d) Nucleotides and carbohydrates	
(xv)	Choose which of the following is ideal for extract	ion of mentha oil.	
	a) Hydrodistillation	b) Steam distillation	
(xvi	c) Both Select the correct answer: the biological source of	d) None f Citronella is	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	a) Cymbopogon citratus c) Cymbopogon flexuosus	b) Cymbopogon nardus d) Cymbopogon martinii	
(xvii) Choose the correct answer: the chemical categor		
		b) Sesquiterpene Lactone d) Tetraterpene Lactone	
xviii) Illustrate which of the following is not an utilizati	on of Atropine.	
(xix)	a) Anti diabetic c) Mydriatic Select the correct answer: Which of the following	b) Antispasmodic d) Antidote to opium poisoning g elements is found in all amino acids.	
(xx)	a) Carbon, Hydrogen, and Oxygen c) Carbon, Hydrogen, and Sulfur Select the correct answer: which type of amino a for forming disulfide bonds between protein cha		
	a) Hydrophilic c) Aliphatic	b) Aromatic d) Sulfur-containing	

Group-B (Short Answer Type Questions)

5 x 7=35

2.	Define PUFA and MUFA with example.	(5)
3.	B. Explain the critical point in a phase diagram.	
	Explain the disadvantages associated with conventional extraction technique.	(5)
	5. Discuss the continuous hot extraction process.	
	5. Illustrate the difference between HPLC and Prep HPLC.	
7.	Explain the biological sources chemical constituents adulterants and use of one a producing plant source.	atropine (5)
	OR	
	Explain biosources, chemical constituents of Liquorice and Vinca.	(5)
8.	Justify the sentence: Microwave Assisted Extraction (MAE) is better extraction m soxhlet extraction.	ethod than (5)
	OR	
	Explain the factors affecting the Microwave Assisted Extraction.	(5)
	Group-C	
	(Long Answer Type Questions)	10 x 2=20
9.	Discuss the application of IR Spectroscopy and NMR in phytochemistry.	(10)
10. Explain in detail about super critical fluid extraction.		(10)
	OR Summarize the principle, procedure of PC and TLC with detailed diagram.	(10)
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