Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM - SEMESTER–5 EXAMINATION – WINTER -2023

Subject Code: BP503TP **Date: 07/12/2023**

Subject Name: Pharmacognosy and Phytochemistry II

Time:10.30 a.m. to 1.30 p.m. **Total Marks: 80**

Instructions:

1. **Attempt any five questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Write the role of radio isotopes in the in the investigation of Biogenetic Studies.	**06**
	(b)	Explain in brief Shikimic acid pathway. Write a note on secondary metabolites derived from the same.	**05**
	(c)	Write in detail about amino acid pathway.	**05**
Q.2	**(a)**	Write the utilization, isolation and estimation method of Sennoside.	**06**
	(b)	Write the large scale production and estimation of Digoxin.	**05**
	(c)	Give the source, isolation and identification method of Curcumin .	**05**
Q.3	**(a)**	Write a note on industrial scale production and estimation of anti cancer drug.	**06**
	(b)	Write biological source, family, chemical constituents and uses of Opium alkaloids.	**05**
	(c)	Write the entire Pharmacognosy of Ginger.	**05**
Q.4	**(a)**	Define extraction. Enlist various modern methods of extraction. Explain pressurized liquid extraction method in detail .	**06**
	(b)	What are tannins? Write the difference between hydrolysable and condensed tannin with examples.	**05**
	(c)	Write the application of spectroscopy in the identification of crude drugs.	**05**
Q.5	**(a)**	Write significance of Thin layer chromatography (TLC) in isolation, purification and identification of crude drugs.	**06**
	(b)	Write a note on caratenoids.	**05**
	(c)	Write down isolation, identification and analysis of Artemisin.	**05**
Q. 6	**(a)**	Distinguish the difference between cassia and cinnamon bark.	**06**
	(b)	Write source, morphology and uses of coriander fruit.	**05**
	(c)	Write the chemical test and uses of Aloe.	**05**
Q.7	**(a)**	Write a note on reserpine alkaloids.	**06**
	(b)	Write the method of isolation of diosgnin from Dioscorea.	**05**
	(c)	Describe a suitable method for production and estimation of caffeine.	**05**

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