Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Ph. - SEMESTER– V• EXAMINATION – SUMMER -2022

Subject Code: BP503TP Date: 04/06/2022

Subject Name: Pharmacognosy and Phytochemistry-II

Time: 02:30pm to 05:30pm 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)**	Give method for isolation and estimation of caffein.	**06**
	(b)	Write biological source, family, chemical constituents, uses and marketed formulation of Liquorice.	**05**
	(c)	Draw a neat and well labelled diagram of TS of Fennel.	**05**
Q.2	**(a)**	Write the utilization of radioactive isotopes in the investigation of Biogeneticstudies	**06**
	(b)	Write biological source, family, chemical constituents, uses and marketed formulation of Rauwolfia.	**05**
	(c)	Describe a suitable method for production and estimation of Taxol.	**05**
Q.3	**(a)**	Write biological source, isolation and estimation of method of Podophyllotoxin.	**06**
	(b)	Write down isolation, identification and analysis of Menthol.	**05**
	(c)	Give the source, isolation and identification method of Glycyrrhetinic acid.	**05**
Q.4	**(a)**	Define extraction. Enlist different modern methods of extraction. Explain any one method in detail.	**06**
	(b)	Write application of modern chromatographic techniques in isolation and identification of phytoconstituents.	**05**
	(c)	Describe a suitable method for production and estimation of Diosgenin.	**05**
Q.5	**(a)**	Write a note on production and estimation of Sennosides.	**06**
	(b)	Write biological source, family, chemical constituents, uses and marketed formulation of Gentian.	**05**
	(c)	Draw a neat and well labelled diagram of TS of Clove.	**05**
Q. 6	**(a)**	Give the source, isolation and identification method of Atropine.	**06**
	(b)	Differentiate between two varieties of Catechu.	**05**
	(c)	Write biological source, family, chemical constituents, uses and marketed formulation of Ginger.	**05**
Q.7	**(a)**	Write in detail about shikimic acid pathway.	**06**
	(b)	Write in detail about acetate mevalonate pathway.	**05**
	(c)	Explain the biosynthetic pathways used for the biosynthesis of lipids in plant.	**05**

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