Seat No.: Enrolment No. **GUJARAT TECHNOLOGICAL UNIVERSITY** BPHARM - SEMESTER II (OLD Syllabus) • EXAMINATION - SUMMER • 2015 Subject code: 220005 Date: 09-06-2015 Subject Name: Pharmacognosy-I Time: 10:30 am - 01:30 pm **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** Define seed. Explain types of seed with examples. 06 (a) Give difference between following; (b) 05 (1) Heartwood and Sapwood (2) Raceme and Cymose inflorescence. Write a note on underground modification of stem. 05 (c) **Q.2** What is fruit? Write a note on dry, dehiscent fruits with examples. (a) 06 (b) Explain following terms; 05 (1) Pneumatopores (2) Sychonus (3) Stipule (c) Write a note on Mutation with its application for medicinal plants. 05 Explain histological difference between monocot and dicot leaf with Q.306 (a) suitable diagram. Write a brief note on the following; (any two) (b) 05 (1) Phyllotaxy (2) Epiphytes (3) Aestivation Explain plant growth regulators and write a note on gibberellins. (c) 05 0.4 Explain soil, soil fertility, Altitude, irrigation and temperature as 06 (a) factors affecting cultivation of medicinal plants. Write a note on Microscopical evaluation of Medicinal plants. 05 (b) Define Pharmacognosy and explain scopes of this subject. (c) 05 **Q.5** Write a note on Adulteration of crude drugs. 06 (a) Give definition and chemical tests of the following; (any two) 05 (b) (1) Alkaloids (2) Tannins (3) Volatile oil Enumerate different sources of crude drugs. Write a detailed note on 05 animal source.

Q. 6	(a)	Define Lipids. Explain in detail, Fixed oil, Fats and Waxes with examples.	06
	(b)	Give Biological source, family, Chemical constituents and uses of	05
		following; (any two)	
		(1) Theobroma oil	
		(2) Alsi oil	
		(3) Lanolin	
	(c)	Explain following sentences;	05
		(1) Cod liver oil can not be substituted by Shark liver oil.	
		(2) Pectin is known as reversible colloid.	
		(3) Sesame oil don't need external preservative for storage.	
Q.7	(a)	Give definition, classification, Physical, chemical properties and	06
		pharmaceutical uses of carbohydrates.	
	(b)	Give Biological source, family, chemical test and uses of following;	05
		(any two)	
		(1) Honey	
		(2) Starch	
		(3) Isabgul	
	(c)	Give difference between;	05
		(1) Persian Tragacanth and Indian Tragacanth.	
		(2) Agar and Sodium alginate.	
