

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm
SEMESTER: VII

Subject Name: Nutraceuticals

Subject Code: 2270008

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	Theory		Practical	
				External	Internal	External	Internal
3	0	0	3	80	20	0	0

No	Course Content	Hrs
1	Historical perspective, classification, scope & future prospects. Applied aspects of the Nutraceutical Science. Sources of Nutraceuticals. Relation of Nutraceutical Science with other Sciences, current market trend in nutraceuticals industry, sourcing information of various nutraceuticals through web data mining	8
2	Food as remedies: Nutraceutical remedies for common disorders like arthritis, bronchitis, circulatory problems, hypoglycemia, nephrological disorders, liver disorders, osteoporosis, psoriasis and ulcers etc.	9
3	Nutraceutical rich supplements like green tea, lecithin, mushroom extract, chlorophyll, spirulina, glucosamine, octacosanol, lycopene, carnitine, melatonin, grape products, flaxseed, Soy proteins and soy isoflavones in human health	8
4	Health Food: Dietary fibers, prebiotics and probiotics vegetables, cereals, milk and dairy products as functional foods. Health effects of common beans, capsicum annum, mustards, ginseng, garlic, citrus fruits, fish oils, and sea foods	8
5	Bioavailability enhancers and Herbal beverages and drinks: health drink	3
6	Packaging strategies for nutraceutical products and labeling and claims for nutraceuticals products	3
7	Toxicity studies and regulatory guidelines for nutraceutical products, current Good Manufacturing Practices (cGMPs), DSHEA act and Global regulatory agencies and bodies for nutraceuticals in different countries.	6

References Books:

1. Pathak YV. Handbook of Nutraceuticals Volume I: Ingredients, Formulations, and Applications, CRC Press, 2009. Ed: 1th
2. Aluko RE. Functional Foods and Nutraceuticals, Springer Verlag GMBH, 2012
3. Hildebert Wagner and Sabine Bladt, Plant Drug Analysis: A Thin Layer Chromatography Atlas,, New Delhi: Springer (India) Pvt. Ltd., 2nd ed. 1996
4. D'Amelio, Frank S. Sr., Botanical: A Phytocosmetic Desk Reference; New York: CRC Press, I Llc, Boca Raton, Florida, U.S.A. 1999
5. Stephen J. Cutler and Horace G. Cutler, Biologically Active Natural Products: Pharmaceuticals; CRC Press, Boca Rotan London, New York. Washington DC 2000
6. Marc Paye, André O. Barel, Howard I. Maibach, Handbook of Cosmetic Sciences, Informa Press, Tylor and Francis, LLC, 2006
7. Vermeer BJ, Definition In: Peter Elsener, Howard I. Maibach, editors Cosmeceuticals: Drugs vs. Cosmetics, New York, Marcel Dekker, 2000