GUJARAT TECHNOLOGICAL UNIVERSITY

Food Processing & Technology

B. E. SEMESTER: VI

Subject Name: **Food Rheology and Sensory Evaluation**
Subject Code: **161402**

Teaching Scheme				Evaluation Scheme		
Theory	**Tutorial**	**Practical**	**Total**	**University Exam (Theory) (E)**	**Mid Sem Exam (Theory) (M)**	**Practical (I)**
3	0	2	5	70	30	50

Sr. No	Course Content	Total Hrs.
1.	**Introduction:** Mechanical properties of foods, Mechanical models to visualize behavior of foods, basic and rheological considerations and their applications to foods.	07
2.	**Sensory Charecteristics of Food:** Colour and appearance, texture and mouth-feel, aroma, overall taste.	07
3.	**Sensory Evaluation Methods:** Sensory evaluation laboratory set up, factors affecting sensory panel members, **s**ensitivity tests; Discrimination tests; Qualitative tests; Quantitative tests; Consumer tests; Score card development, Requirement of tests systems for measuring food texture, types of texture instruments and their operating mechanism, calibration, performance of test and measurement of test parameters. Interpretation of test result.	18
4.	**Rheological Attributes:** Textural properties of fruits and vegetables, Dough, Pasta and baked products, dairy products, meat and their instrumental measurement.	10
5.	**Rheology of Chocolate:** Textural characteristics of food emulsions, functions of emulsifiers in relation to food texture.	08

Reference Books:

1. Rheology and texture in food quality by Deman JM. AVI Publishing Co.
2. Physical properties of plant and animal product by Mohsenin NN. Gordon and Breach Science Publishers.
3. Sensory properties of food by Birch GC, Breman JG and Parker KJ. Allied Science Publisher.
4. Sensory Evaluation Techniques by Milgaard M, Civille GV and Carr BT. CRC Press Inc.
5. Sensory Analysis of Food by Piggot JR. Elsevier Applied science.
6. Guidelines for Sensory Analysis in Food Product Development and Quality Control by Carpenter R, Lyon DH and Hasdell TA. Aspen Publishing.