

M.A.H.SC. – 101
Food – Science & Experimental Cookery (core compulsory)

Objectives :-

- To acquaint the students with basic unit operations in cookery.
- To acquire knowledge concerning introduction and importance of food science.
- Develop ability in preparing various food product.
- To aware the students about food processing.
- To provide knowledge about various activities like leavening agent, flavoring agent, coloring agent, etc.

Unit – 1

- Introduction & Definition of food science.
- Palatability of food and measurement of its acceptance by methods of sensory evaluation.
- Relation of cookery to colloid chemistry.
- Standardization of recipe.

Unit – 2

- Importance of food additives..
- Importance of leavening agents.
- Various pigments in vegetables and various types of vegetables.
- Egg Cookery its structure, composition and nutritive quality.
- Spices and beverages classification of beverages importance of spices and beverages in relation to nutrition and health

Unit -3

- Fruits & Vegetables its importance fresh and dried fruits.

Cereals – its composition properties and its use in cookery use of flour and flour mixtures in cookery importance of gluten in cookery use of better and dough.

- Pulses and nuts structure types effect of various cooking methods of & nuts.

Unit -4

- Milk and milk products various types of milk, Pasteurisation process study of various milk products.
- Fats & Oils properties of fat rancidity of fat.
- Sugar cookery classification and properties of sugar.

Practical :-

1. Estimation of gluten in content from wheat flour.
2. Use of various leavening agent in cookery.
3. Sugar Cookery – crystallization of sugar, preparation of various types of syrup, preparation of crystalline and non crystalline candy, preparation of some special sweets using various types of sugar syrup.
4. Egg cookery soft and hard boiled egg, fried egg, poached egg, omlette, cake, use of egg as a binding thickening and emulsifying agent.
5. Effect of cooking on various pigments of vegetables in various medium.
6. Milk Cookery – Effect of cooking on milk, preparation of paneer by various methods from milk.
7. Use of emulsion in cookery.

Reference Books :-

1. Food science and experimental cookery By M. Swaminathan.
2. Food science by B. Shrilaxmi
New Age International Publishers New Delhi.
3. Foods selection and preparation sweedam and Makeller.,
4. Food Science by Dr. Uma D. Patel.
5. Essential of Foods and Nutrition By M. Swaminathan.