

## Home Science

### (A) Major Core Courses

Sl. No.	Sem	Type of Course	Name of Course	Credits	Marks
1.	I	MJC-1 (T)	Food Science & Nutrition (T)	4	100
2.	I	MJC-1 (P)	Food Science & Nutrition (P)	2	100
3.	II	MJC-2 (T)	Fundamentals of Human Development (T)	4	100
4.	II	MJC-2 (P)	Fundamentals of Human Development (P)	2	100
5.	III	MJC-3	Resource Management Concepts and Context	5	100
6.	III	MJC-4	Human Physiology	4	100
7.	IV	MJC-5 (T)	Communication & Extension (T)	3	100
8.	IV	MJC-5 (P)	Communication & Extension (P)	2	100
9.	IV	MJC-6 (T)	Introduction to Textile (T)	3	100
10.	IV	MJC-6 (P)	Introduction to Textile (P)	2	100
11.	IV	MJC-7 (T)	Dietetics (T)	3	100
12.	IV	MJC-7 (P)	Dietetics (P)	2	100
13.	V	MJC-8	Child Psychology	5	100
14.	V	MJC-9	Family Finance & Consumer Behavior	5	100
15.	VI	MJC-10	Non Formal, Adult and Lifelong Education	4	100
16.	VI	MJC-11 (T)	Child Rights and Social action (T)	5	100
17.	VI	MJC-11 (P)	Child Rights and Social action (P)	5	100
18.	VI	MJC-12 (T)	Planning & Designing interior space (T)	5	100
19.	VI	MJC-12 (P)	Planning & Designing interior space (P)	5	100
20.	VII	MJC-13 (T)	Clothing Construction (T)	5	100
21.	VII	MJC-13 (P)	Clothing Construction (P)	5	100
22.	VII	MJC-14	Research Methodology	5	100
23.	VII	MJC-15	Early Childhood Care and Education	6	100
24.	VIII	MJC-16	Public Health Nutrition	4	100

Sub Total=80

④

SEMESTER – I

MJC-1

**Food and Nutrition**

Course Outcomes:

**CO1:** Understand the relationship between food, nutrition and health

**CO2:** Understand the role and functions of nutrients, its composition, requirements and the effect of deficiency and excess

**CO3:** Understand the concept of an adequate diet and the importance of meal planning

**CO4:** Describe different methods of cooking and its impact on the stability of nutrients.

MJC-1		<b>Food and Nutrition</b>	
(Theory: 4 Credits)			
Unit	Topics to be covered	No. of Lectures	
I	<b>Introduction to Food and Nutrition</b> <ul style="list-style-type: none"> <li>• Definition and terms used in Food and Nutrition</li> <li>• Functions of food</li> <li>• Concept of Balanced Diet</li> <li>• Malnutrition:- Types, causes, symptoms and treatment</li> <li>• Meal planning–steps in meal planning, factors affecting meal planning for a family</li> <li>• Food Exchange list, Food pyramids</li> </ul>	6	
II	<b>Basic concepts, classification, composition, nutritive value and role in cookery of different food groups.</b> <ul style="list-style-type: none"> <li>• Cereals and Cereal Products</li> <li>• Pulses and Legumes</li> <li>• Fruits and Vegetables</li> <li>• Salt, Sugar and Jaggery</li> <li>• Nuts, Oils and Oil seeds</li> <li>• Milk and Milk Products</li> <li>• Eggs, Meat, poultry and fish</li> <li>• Spices and Condiments -Importance and functional properties</li> </ul>	12	
III	<b>Macronutrients</b> Definition, classification, dietary Sources, functions, Recommended Dietary Allowances, clinical signs and symptoms of Deficiency diseases and Excess of <ul style="list-style-type: none"> <li>• Carbohydrates</li> <li>• Proteins</li> <li>• Lipids</li> <li>• Water</li> </ul>	10	

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<b>IV</b>	<b>Micro nutrients</b> <b>Minerals</b> Classification, Sources, functions and deficiency of Calcium, Phosphorus, Magnesium, Sodium, Potassium, Selenium, Iron, Zinc, Iodine, Copper  <b>Vitamins</b> Classifications, functions, sources, requirement ,clinical signs and symptoms and deficiency of: -Fat Soluble Vitamins - A, D, E and K - Water Soluble Vitamins-B Complex Vitamins- Thiamine, Riboflavin, Niacin, Pyridoxine, Folic acid, Cyanocobalamin and Vitamin C	<b>08</b>
<b>V</b>	<b>Methods of Cooking</b>  Types, Advantages and disadvantages of cooking methods (i) Moist heat methods –boiling, simmering, steaming, & Pressure cooking (ii) Dry heat methods – baking. Microwave (iii) Fat as a medium for Coking-shallow and deep fat frying	<b>04</b>
	Total	<b>40</b>

Reading List:

- Bamji, MS., Krishnasamy, K., Brahmam ,G.N.V. (2012). Text Book of Human Nutrition, 3rd Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.
- Longvah, T., Ananthan, R., Bhaskarachary, K., Venkaiah, K. (2017). Indian Food
- Composition Tables (IFCT), Indian Council of Medical Research, National Institute of Nutrition, Hyderabad.
- Maney, S. (2008). Foods, Facts and Principles, 3rd Edition Published by Wiley Eastern, New Delhi.
- aina, U., Kashyap, S., Narula, V., Thomas S, Suvira., VirS., Chopra, S. (2010). Basic Food Preparation: A Complete Manual, 4th Edition, Orient Black Swan Ltd, Mumbai.
- Srilakshmi, B. (2017). Nutrition Science, New Age International (P) Ltd., New Delhi.
- Sunetra, Roday. (2017). Food Science and Nutrition, Oxford University Press, New Delhi.
- Usha, Chandrasekhar. (2002). Food Science and Application in Indian Cookery, Phoenix Publishing House P. Ltd., New Delhi.

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MJC I	Foods and Nutrition	No. of classes
<b>Practical: 2 Credits</b>		
<p><b>1. Basic Cooking skills</b> Weights and measures - standard and household measures for raw and cooked foods.</p> <p><b>2. Preparation of various dishes using different methods of cooking</b></p> <ul style="list-style-type: none"><li>- Boiling/steaming</li><li>- Roasting</li><li>- Frying-Deep/shallow</li><li>- Pressure cooking</li></ul> <p><b>3. Food Preparation, understanding the principles involved, nutritional quality of commonly consumed recipes in each food group</b></p> <ul style="list-style-type: none"><li>- Cereals: rice, roti, paratha, poori, pastas etc</li><li>- Pulses: Whole, dehusked- Dal, sambar, Chole, etc</li><li>- Vegetables: Dry preparations, Curries</li><li>- Milk and milk products: Kheer , Custard,</li><li>- Meat, fish and poultry preparations</li><li>- Egg preparations: Boiled, poached, fried, omelette</li></ul> <p><b>4. Different styles of cutting fruits and vegetables</b></p> <ul style="list-style-type: none"><li>- Salad Decoration/Dressing</li><li>- Table setting, Napkin Folding</li></ul>		40

REFERENCES

- Srilakshmi B, (2007), Dietetics. New Age International publishers. New Delhi
- Srilakshmi B ,(2002), Nutrition Science. New Age International publishers. New Delhi
- Swaminathan M. (2002), Advanced text book on food and Nutrition. Volume I. Bappco.
- Gopalan. C., RamaSastry B.V., and S. C. Balasubramanian (2009), Nutritive value of Indian Foods. NIN. ICMR. Hyderabad.
- Mudambi S R and Rajagopal MV, (2008), Fundamentals of Foods, Nutrition & diet therapy by New Age International Publishers, New Delhi

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