

- Butter scotch
4. Decoration/ frosting of cake with royal icing/ butter cream icing

ESSENTIAL/ RECOMMENDED READINGS (Theory and Practical):

- Manay, S. and Shadaksharaswami, M. (2004). Foods: Facts and Principles. New Age Publishers.
- Marion Bennion, Barbara Scheule. (2016). Introductory foods, 13th edition. Pearson, Kent State University.
- Mohini, Sethi. & Eram, Rao. (2011). Food science- Experiments and applications, 2nd ed., CBS publishers & Distributors Pvt Ltd.
- Raina et.al. (2003). Basic Food Preparation-A complete Manual. 3rd Ed. Orient Longman Pvt. Ltd.
- Minifie, B.W. (1999). *Chocolate, Cocoa and Confectionary*. Aspen Publication.

SUGGESTED READINGS:

- Edwards, William. P. (2000). The Science of Sugar Confectionery, The Royal society of Chemistry
- Lees, R. (2012). *Sugar confectionery and chocolate manufacture*. Springer Science & Business Media.
- Lees, R. & Jackson, EB. (1992). *Sugar Confectionery and Chocolate Manufacture*. Springer.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi.

DISCIPLINE SPECIFIC ELECTIVE COURSE – DSE-12-FT: PUBLIC HEALTH NUTRITION: CURRENT CONCERNS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Public Health Nutrition: Current Concerns	4	3	1	0	Class XII	Nil

LEARNING OBJECTIVES:

- To understand the varied dimensions of nutritional issues and identify different approaches that can be applied at the community level to improve nutritional well-being.
- To attain knowledge about the policies and intervention programs in India aimed at addressing

malnutrition.

- To understand the concept of food and nutrition security and identify its determining factors.

LEARNING OUTCOMES:

After completion of the course, the students will be able to:

- Comprehend the complex and diverse nature of nutritional challenges.
- Gain awareness of the various strategies that can be implemented at the community level to enhance nutritional status.
- Acquire knowledge of the policies and intervention programs in India designed to combat malnutrition.
- Develop an understanding of the concept and key factors influencing food and nutrition security.

SYLLABUS OF DSE: 12-FT

THEORY (Credits:3; Hours 45)

UNIT I: Nutritional Problems at the Community Level (12 Hours)

Unit Description: Students will be explained about the existing nutritional problems in the community in the present scenario.

Subtopics:

- Introduction to Public Nutrition
Etiology, prevalence, clinical features and preventive strategies for-
 - Undernutrition - Protein energy malnutrition, Moderate Acute Malnutrition, Severe Acute Malnutrition, Iron Deficiency Anaemia, Vitamin A Deficiency, Iodine Deficiency Disorders
 - Obesity
 - Coronary heart disease, Diabetes

UNIT II: Approaches to Enhance Community Nutrition and Health (9 Hours)

Unit Description: This unit will deal with the different approaches and strategies that could help alleviate the nutrition and health status of the community.

Subtopics:

- Assessment of Nutritional Status
- Appropriate interventions involving different sectors such as Food, Health, and Education – diet diversification, food fortification, supplementation, genetic modification, improved water and sanitation, immunization, promotion of optimal infant and young child feeding practices, growth monitoring and promotion (GMP)

UNIT III: Nutrition Policy and Programmes (12Hours)

Unit Description: Students will be introduced to all the major ongoing national level interventions and strategies and goals to combat malnutrition in the nation.

Subtopics:

- National Nutrition Policy
- Ongoing national nutrition programmes – Integrated Child Development Services (ICDS) Scheme, Mid-day Meal Programme (MDMP), Anaemia Mukta Bharat, National programmes for prevention of Vitamin A deficiency, National Programme for Prevention and Control of Cancers, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), POSHAN Abhiyaan, POSHAN 2.0

UNIT IV: Food and Nutrition Security**(12 Hours)**

Unit Description: Students will be taught the concept of food and nutrition security and the associated national level intervention and programs

Subtopics:

- Concept, components, determinants
- Overview of the ongoing public sector programmes for improving food and nutrition security

TUTORIAL
(Credit 1: Hours 30)

1. Anthropometric assessment (Height, Weight, BMI, MUAC, Waist and Hip circumference)
2. Market survey of Ready to use Therapeutic Food products for combating nutritional deficiencies
3. Development of Educational aid for addressing nutritional problems of community
4. Visit to on-going nutrition programmes

ESSENTIAL/ RECOMMENDED READINGS (Theory and Practical):

- Vir, S. C. (Ed.). (2023). Child, Adolescent and Woman Nutrition in India: Public Policies, Programmes and Progress. Taylor & Francis.
- Bamji, MS, Krishnaswamy, K. & Brahmam, G N (Eds.). (2017). Textbook of Human Nutrition (4th ed.). New Delhi, India: Oxford and IBH Publishing Co. Pvt. Ltd.
- Park, K (2017). Park Textbook of Preventive and Social Medicine (24th ed.). Jabalpur, India: Banarasidas Bhanot Publishers.
- Khanna K, Gupta S, Seth R, Passi SJ, Seth R, Mahna R, Puri S (2013). Textbook of Nutrition and Dietetics. 2nd Edn. Phoenix Publishing House Pvt. Ltd.

SUGGESTED READINGS:

- Gibney, M J, Margetts, B M, Kearney, J M & Arab, L (Eds.). (2005). Public Health Nutrition. Oxford, UK: Blackwell Science.
- ICMR (2011) Dietary Guidelines for Indians – A Manual. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- Kishore, J (2016). National Health Programs of India (12th ed.). New Delhi, India: Century Publications.
- Chadha, R and Mathur, P (eds.) (2015). Nutrition A Lifecycle Approach. New Delhi, India: Orient Blackswan Pvt. Ltd.
- Ministry of Women and Child Development (MWCD), Government of India. POSHAN

Abhiyaan [online]. Available at: <https://www.mygov.in/campaigns/poshan-abhiyaan-2024/> (Accessed: December 14, 2024).

- Ministry of Women and Child Development (MWCD), Government of India. POSHAN Abhiyaan [online]
https://wcd.delhi.gov.in/sites/default/files/WCD/generic_multiple_files/final_saksham_anganwadi_and_mission.pdf (Accessed: December 14, 2024).
- National Health Mission [online]
<https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1448&lid=797> (Accessed: December 14, 2024).

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi.

DISCIPLINE SPECIFIC ELECTIVE – DSE-14-FT: FUNCTIONAL FOODS AND NUTRACEUTICALS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Functional Foods and Nutraceuticals	4	3	0	1	Class XII	Nil

LEARNING OBJECTIVES:

- To develop comprehensive understanding of different functional foods and nutraceuticals
- To describe the role of nutraceuticals and functional foods in preventing chronic diseases and enhancing overall health
- To understand the regulatory aspects pertaining to marketing and labelling of functional foods and nutraceuticals

LEARNING OUTCOMES:

After completion of the course, the students will be able to:

- Elucidate the different types of nutraceuticals and functional foods
- Comprehend the effectiveness of nutraceuticals and functional foods in promotion of human health
- Understand food sources amalgamated with functional and bioactive compounds
- Acquire knowledge about the regulatory aspects of functional foods and nutraceuticals

SYLLABUS OF DSE-14-FT

THEORY (Credits: 3; Hours: 45/)

UNIT I: Introduction to Functional Foods and Nutraceuticals

(6 Hours)