# CBSE | DEPARTMENT OF SKILL EDUCATION CURRICULUM FOR SESSION 2024-2025

# FOOD, NUTRITION & DIETETICS (SUBJECT CODE - 834)

JOB ROLE: DIET ASSISTANT Sector – Health Care Class – XII

## **COURSE OVERVIEW:**

The discipline of nutrition empowers learners to develop an understanding of the concept, principles of nutrition which will enable them to make the best possible choices of food for meeting the nutritional needs of self, family and community at large. It is so designed to help learners understand the concept of food and nutrition security and create an awareness regarding major public health/nutrition problems affecting vulnerable sections of the society and strategies, programmers, policies enacted by the Government for combating these problems. Further the course will focus on study about the concept, scope, need, importance and process of nutrition education. Yet another focus of the discipline is to provide knowledge to learners for nutritional therapy and counseling service for the purpose of disease management. Creating awareness towards food safety and quality control measures, laws and policies is another important focus.

The syllabus will help learners develop knowledge and skills in this area. This would make them competent to meet challenges of becoming a responsible citizen and effective nutrition educator.

#### **OBJECTIVES OF THE COURSE:**

The objectives of the course are to:

- To help students recognize that food is a basic requirement of life.
- Describe basic food preparation techniques.
- Identify the physical, chemical, and/or microbiological changes in food caused by heat, enzymes, changes in pH, freezing, incorporation of air, and mechanical manipulation.
- Understand food quality.
- Learn fundamentals of modifying recipes to meet current nutrition recommendations for fat, cholesterol, fiber, etc. without sacrificing flavor or appearance.
- Learn to find credible sources of information re. food science and nutrition.
- Identify sources and functions of carbohydrates, proteins, fats, alcohol, vitamins, minerals, and water in the human body.
- Demonstrate the importance of a balanced diet and use tools that can be utilized to
  evaluate the nutritional adequacy of a diet Identify the relationship between diet and
  chronic diseases/illnesses (cardiovascular disease, diabetes, obesity, cancer,

hypertension, osteoporosis, etc.) and what modifications can be made in the diet to reduce the risk for these diseases/illnesses.

- Be able to read and interpret a nutrition label.
- Utilize nutrition terminology and related terminology appropriately.
- Demonstrate lifelong healthful eating habits by differentiating between beneficial and nonbeneficial dietary practices

#### SALIENT FEATURES:

- The syllabus of nutrition at Senior Secondary level develops an understanding in the learners that the knowledge and skills acquired through the study of nutrition facilitates development of good health and well-being for self, family and community. It endeavors to –Acquaint learners with the basics of food, nutrition, health, fitness and food safety and quality control.
- Sensitize learners to the common nutritional disorders effecting vulnerable groups in our country and strategies to manage them.
- Impart knowledge of nutrition and lifestyles to enable prevention and management of diseases.
- Develop skills of communication to assist in advocacy and dissemination of knowledge to community.
- Enable learners to become alert and aware consumers, and inculcate healthy food habits.

#### **LIST OF EQUIPMENT AND MATERIALS:**

The list given below is suggestive and an exhaustive list should be prepared by the vocational teacher. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

#### **Teaching/Training Aids:**

- 1) Computer
- 2) LCD Projector
- 3) Projection Screen
- 4) White/Black Boards
- 5) Flip Charts
- 6) Video and audio recorders

### **CAREER OPPORTUNITIES:**

The students will acquire a job with a low stress level, good work-life balance and solid prospects to improve and get promoted to higher levels of recognition.

- Hospitals
- Research institutes
- Community sectors
- Health & Wellness centre
- Education sector
- Hospitality sector

### **VERTICAL MOBILITY:**

At B.S. level, students may start their career as a Dietitian and they can reach at higher level over the period of time by pursuing master degree and PhD. For the career progression, following career options are available in the field of nutrition:

- Dietitian-Clinical/Community/Public Health/Research
- Teaching/Research scholar
- Food service manager
- Animal nutritionist
- Health promotion specialist
- International aid/Development worker
- Health & Wellness coach

### **CURRICULUM:**

This course is a planned sequence of instructions consisting of Units meant for developing employability and Skills competencies of students of Class XII opting for Skills subject along with other subjects.

#### **Marks Distribution**

Class	Theory	Practical	Total
Class XII	60	40	100

# FOOD, NUTRITION & DIETETICS (SUB. CODE - 834) CLASS – XII

Total Marks: 100 (Theory - 60 + Practical - 40)

	UNITS	NO. OF HOURS for Theory and Practical	MAX. MARKS for Theory and Practical
	Employability Skills		
	Unit 1 : Communication Skills - IV	13	2
4	Unit 2 : Self-Management Skills - IV	07	2
Part	Unit 3 : ICT Skills - IV	13	2
P	Unit 4 : Entrepreneurial Skills - IV	10	2
	Unit 5 : Green Skills - IV	07	2
	Total	50	10
	Subject Specific Skills		
	Unit 1: Clinical and Therapeutic Nutrition	25	15
art B	Unit 2 : Diet in Health and Disease: cause, physiological conditions, clinical symptoms and dietary management	25	15
P	Unit 3: Diet in Health and Disease - II	25	10
	Unit 4 : Food Safety and Quality Control	20	10
	Total	95	50
	Practical Work		
Part C	Viva based on Project		10
	Practical File / Power Point presentation	55	15
	Demonstration of skill competency via Lab Activities		15
	Total	55	40
	GRAND TOTAL	200	100

NOTE: Detailed Curriculum/ Topics to be covered under Part A: Employability Skill can be downloaded from CBSE website.

UNIT	SUB-UNIT	SESSION/ ACTIVITY/ PRACTICAL	
	3.4 Celiac disease, Lactose Intolerance, peptic ulcer	Practical/Project:  • on Celiac disease, Lactose Intolerance, peptic ulcer	
Unit 4: Food Safety and Quality Control	<b>4.1</b> Food Hazards (physical, chemical, biological) Food borne	Session: Learning about the different types of food hazards.  • Concept, Causes and preventive measures	
	Diseases: Cholera, Typhoid, Salmonellosis	of Food borne disease.	
	4.2 Personal Hygiene	<b>Session:</b> Understanding basic personal hygiene practices.	
	4.3 Food Hygiene and Sanitation and Environmental Sanitation and Safety (Water supply, Waste Disposal) at home level.	<b>Session:</b> Assimilating knowledge about the different kinds of Food Hygiene and Sanitation practices.	
	<b>4.4</b> Food Adulteration:	Practical:  • Concept/Definition as given by FSSAI, Common adulterants present in foods (cereals, pulses, milk and milk products, fats and oils, sugar, honey, spices and condiments), Ill effect of adulterants (metanil yellow, argemone, kesari dal) on human health common methods for detecting adulteration at home)	
	<b>4.5</b> FSSAI Act 2006	<b>Session:</b> Assimilating knowledge about the different kinds of Symbiotic tourism products	
	<b>4.6</b> Food labels with reference to food products	Reading and Understanding Food labels     with reference to food product	
	<b>4.7</b> HFSS Foods and their implications for child health	Project: Create a project  • outline and Conduct extensive research on HFSS Foods	

## PRACTICAL GUIDELINES FOR CLASS XII

#### **Assessment of performance:**

In class XII – Two examiners (one internal and one external) only assigned for the conduct and assessment of Practical Examinations each in Senior Secondary School Curriculum Question for the viva examinations should be conducted by both the examiners. Question to be more of General nature, project work or the curriculum. Investigatory Project especially those that show considerable amount of effort and originality, on the part of the student, should get suitable high marks, while project of a routine or stereotyped nature should only receive MEDIOCRE marks.

#### Procedure for Assessment of practical project work:

- Creative skills among students. Students can prepare a Project Report on Operating Costing or Service Costing of any organization viz., transport, hotel, canteen or any other service organization on the basis of their understandability and class room knowledge.
- They may get the guidance from their respective teacher in order to boost their skill and knowledge. The Project should be the sole work of student.
- The mark for the project report will be assessed by the subject teachers, through, a wellplanned rubric, keeping in view the core content, quality of the project and Organization of data.
- As students do not have an external examination teacher could follow similar pattern as enunciated for class XII
- To improve students' presentation skills, it is suggested that the students should be trained to present the final project. The concerned teacher and the students should visit to some Industry or service sector in order to understand knowhow of the business sector. Visiting to Industry or service sectors will enhance their knowledge and improve their skills & understanding.

#### Viva based on Project - 05 marks:

The teacher conducting the final practical examination should ask verbal questions related to the project. If no project has been assigned /made by the students, viva must be based on subject as per the Curriculum only.

#### Project Report & Project File – 15 marks

- 1. Identify food adulteration using visual and chemical methods:
  - a. Turmeric
  - b. Chana dal
  - c. Bura/sugar
  - d. Milk
  - e. Tea leaves
  - f. Coriander
  - g. Black pepper seed
  - h. Desi ghee

- 2. Prepare one preserved product; also prepare a suitable label for it.
- 3. Find out the causes for spoilage of food and enlist general ideas of storing common food at home.
- 4. Critically evaluate factor-influencing selection of food, culture, family food practices, media, and peer group, availability of foods, purchasing power, individual references & health.
- 5. Therapeutic modification of normal diet with respect to consistency, frequency, food stuffs, nutrients and methods of cooking.
- 6. To identify the economic consequences of malnutrition & to learn about the strategies for improving the nutritional status of communities.

PARAMETERS	MARKS
Prepare Project Report based on content, investigation, originality and compilation	35
II) Demonstration of skill competency via Lab Activities	
Viva (Based on Curriculum)	05
TOTAL	40