

Food Nutrition & Dietetics (Subject Code 834)

JOB ROLE: Diet Assistant

CLASS – XI - XII (SESSION 2019-2020)

1. COURSE OVERVIEW :

The DA assists a registered dietician in planning, preparing and serving meals to patients with specific dietary and nutritional needs. The DA is also known as Dietetic Assistant or Dietary Assistant. It is about maintaining personal hygiene and food safety by a Dietician assistant. This standard describes the knowledge and understanding required to maintain personal hygiene and to maintain hygiene while preparing and serving food and dealing with waste.

2. OBJECTIVES OF THE COURSE:

1. Describe basic food preparation techniques.
2. Identify the physical, chemical, and/or microbiological changes in food caused by heat, enzymes, changes in pH, freezing, incorporation of air, and mechanical manipulation.
3. Understand food quality.
4. Learn fundamentals of modifying recipes to meet current nutrition recommendations for fat, cholesterol, fiber, etc. without sacrificing flavor or appearance.
5. Learn to find credible sources of information re. food science and nutrition.
6. Identify sources and functions of carbohydrates, proteins, fats, alcohol, vitamins, minerals, and water in the human body.
7. Demonstrate the importance of a balanced diet and use tools that can be utilized to evaluate the nutritional adequacy of a diet (RDA, Dietary Guidelines, MyPlate, etc.).
8. 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.
9. Recall current nutritional recommendations for healthy eating habits (American Heart Association, American Cancer Society, etc.).
10. Be able to read and interpret a nutrition label.
11. Utilize nutrition terminology and related terminology appropriately.
12. Demonstrate lifelong healthful eating habits by differentiating between beneficial and non-beneficial dietary practices

3. SALIENT FEATURES OF FOOD NUTRITION & DIETETICS:

- Some of the key responsibilities of the Dietician Assistant include diet preparation, diet regulations, food handling, safety and sanitary standards and certain administrative functions.

- Classification of food depending upon perishability, processing (cooked or raw), freshness (frozen or fresh)
- Type of storage required (dry, frozen or refrigerated)
- Equipment to be used
- Observing and reporting any of the following:
- Change in colour, consistency or odour of the food
- Functioning of storage equipment and devices o Personal hygiene and sanitation of self and others working in the department
- Rating and analysis of food storage practices

4. CURRICULUM

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

Theory	70 marks
Practical	30 marks
Total	100 marks

The unit-wise distribution of periods and marks for Class XI is as follows:

CLASS XI (SESSION 2019-2020)			
	Units	No. of Hours for Theory and Practical 200	Max. Marks for Theory and Practical 100
Part A	Employability Skills		
	Unit 1: Communication Skills -I	13	10
	Unit 2: Self-management Skills -I	09	
	Unit 3: Information and Communication Technology Skills – I	06	
	Unit 4: Entrepreneurial Skills - I	16	
	Unit 5: Green Skills – I	06	
	Total	50	10
Part B	Vocational Skills		
	Unit 1: Food and Nutrition: Basic Concepts	15	10
	Unit 2: Nutrition through the Life Cycle	25	15
	Unit 3: : Public Health and Nutrition: Basic Concept	15	10
	Unit 4: Public Health and Nutrition Disorders	25	15
	Unit 5 : Public Health and Nutrition: Programmes and Policies	7	05
	Unit 6: Nutrition Education, Communication and Behaviour Change	8	05
	Total	95	60
Part C	Practical Work		
	Viva based on Project	55	5
	Practical File / Report / Portfolio Power Point presentation		10
	Demonstration of skill competency via Lab Activities		15
	Total	55	30
	GRAND TOTAL	200	100

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 Skill subject along with general education subjects.

Theory	70 marks
Practical	30 marks
Total	100 marks

The unit-wise distribution of periods and marks for Class XII is as follows:

CLASS XII (SESSION 2019-2020)			
	Units	No. of Hours for Theory and Practical 200	Max. Marks for Theory and Practical 100
Part A	Employability Skills		
	Unit 1: Communication Skills -I	13	10
	Unit 2: Self-management Skills -I	09	
	Unit 3: Information and Communication Technology Skills – I	06	
	Unit 4: Entrepreneurial Skills - I	16	
	Unit 5: Green Skills - I	06	
	Total	50	10
Part B	Vocational Skills		
	Unit 1: Clinical and Therapeutic Nutrition	25	15
	Unit 2: Diet in Health and Disease: cause, physiological conditions, clinical symptoms and dietary management	25	15
	Unit 3: Diet in Health and Disease: II	25	15
	Unit 4: Food Safety and Quality Control	20	15
	Total	95	60
Part C	Practical Work		
	Viva based on Project	55	5
	Practical File / Report / Portfolio Power Point presentation		10
	Demonstration of skill competency via Lab Activities		15
	Total	55	30
	GRAND TOTAL	200	100

5. 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:

- A. Computer
- B. LCD Projector
- C. Projection Screen
- D. White/Black Boards
- E. Flip Charts
- F. Video and audio recorders

PRACTICAL GUIDELINES

A. Practical Guidelines - Class XI

1. MINIMUM PASS MARKS

The Minimum pass percentage **as per examination guidelines is 33%**, in the written papers and practical examination.

2. Marks for record, Viva Project etc., in respect of Senior Secondary School Curriculum (Under NSQF) of School Certificate Examination:

Marks allotted for laboratory Record, Viva Voice etc., should be separately stated in the answer book (if answer-Books are used) and added to the marks given for other items. The projects and the practical records, duly punched should be returned to the students concerned immediately after evaluation.

3. Assessment of performance.

- (a) The two examiners, **one internal and the other external** are assigned for the conduct and assessment of Practical Examinations each **Senior Secondary School Curriculum (Under NSQF)**. Questions for the viva examinations should be conducted by both the examiners. Question should 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.
- (b) In the assessment and award of marks, follow strictly the marking Scheme which is given in the list of practical I.e. provided to the Examiners/Schools at the time of Examination.
- (c) Every effort should be made to reach a consensus on the marks to be awarded to individual candidates. If a difference of one or two marks still persists even after discussion the average marks should be awarded.
- (d) Marks awarded for Project / Practical activities, for viva, for project and for Practical files must be separately shown on the answer-book as the total.
- (e) If irregularities are perceived by either examiner in the conduct of the Practical Examination these should be included in the examiner's report and should be sent to the Asstt. Secretary (A.B. Cell) within three days after the end of practical examination.
- (f) The external examiner should assume responsibility of deposit of answer books & award list to the Board.
- (g) Award lists should be signed by both the examiners and should be sent separately through messenger/personally in a double sealed cover and not mixed with the Answer-books. The answer-books can be delivered personally in the Board's office.

(h) The related material will be collected by the external examiner from the allotted schools.

4. Procedure for Record of Marks in the Practical answer-books.

The examiner will indicate separately marks of practical examination on the title page of the answer-books under the following heads:-

a) Viva based on Project and Practical file - 5 marks

The teacher conducting the final practical examination may ask verbal questions related to the project, done by the student.

b) Practical File/ Report / Assignment / Power Point presentation -10 Marks

Students to make a power point presentation / assignment / practical file / report.

c) Demonstration of skill competency in Lab Activities - 15 marks

Activities to be suggested by both the examiners, to be conducted on practical day.

1. Identify and selection of rich sources of nutrients (Protein, Iron, Calcium, Vitamin A, Fat, Vitamin C)
2. Study of physical self with reference to assessment of nutritional status:
 - a) Age, height, weight, MUAC and compare with Standard/References
 - b) Observation of clinical signs / symptoms specific to good health Wellbeing
 - c) Record own diet for a day using 24 hour recall
 - d) Evaluate qualitatively for adequacy using Food groups and how to improve the same
 - e) Record Food practices including food taboos, fasting and special food preparation for adolescent, pregnant/lactating women.
 - f) Plan and design supplementary/complementary foods for infants and supplementary foods for preschoolers, highlighting their nutrient contribution.
 - g) Plan 1-2 healthy snacks for an adolescent suitable in her/his context
3. Collect five nutrition/health/hygiene messages from print and electronic media which have influenced one self.
4. Plan and prepare any one print/traditional/electronic media/approach you would use to disseminate nutrition/health/hygiene message to the community members.

5. Visit to any one programme/ institution (Govt. /NGO) for children/maternal nutrition and health well being (ICDS, MDM primary health care.); observation of activities in the programme and report writing.

MARKING SCHEME OF PRACTICALS:

Q-1 To assess the nutritional status of school children using anthropometry/clinical & Dietary assessment. (6marks)

- a) Observation & recording
- b) Inference & result
- c) Precautions

Q-2 To plan a balanced meal using three food groups.(protective,energygiving,body building) (3 Marks)

Q-3 To plan and design nutritional snacks/food for any one of the following:

- a) For infants
- b) For preschoolers
- c) Adolescence
- d) Pregnant/lactating (4 Marks)

Q-4 Design any one effective message/slogan for awareness of nutrition,health & hygiene in your community. (2 Marks)

Q-5 Practical File / Report / Portfolio & Power Point presentation. (10 Marks)

Q-6 Viva voce based on Project and Practicals covered. (5 Marks)

B. Practical Guidelines - Class XII

1. MINIMUM PASS MARKS

The Minimum pass percentage **as per examination guidelines is 33%**, in the written papers and practical examination.

2. Marks for record, Viva Project etc., in respect of Senior Secondary School Curriculum (Under NSQF) of School Certificate Examination:

Marks allotted for laboratory Record, Viva Voice etc., should be separately stated in the answer book (if answer-Books are used) and added to the marks given for other items. The projects and the practical records, duly punched should be returned to the students concerned immediately after evaluation.

3. Assessment of performance.

- (i) The two examiners, **one internal and the other external** are assigned for the conduct and assessment of Practical Examinations each **Senior Secondary School Curriculum (Under NSQF)**. Questions for the viva examinations should be conducted by both the examiners. Question should 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.
- (ii) In the assessment and award of marks, follow strictly the marking Scheme which is given in the list of practical i.e. provided to the Examiners/Schools at the time of Examination.
- (k) Every effort should be made to reach a consensus on the marks to be awarded to individual candidates. If a difference of one or two marks still persists even after discussion the average marks should be awarded.
- (l) Marks awarded for Project / Practical activities, for viva, for project and for Practical files must be separately shown on the answer-book as the total.
- (m) If irregularities are perceived by either examiner in the conduct of the Practical Examination these should be included in the examiner's report and should be sent to the Asstt. Secretary (A.B. Cell) within three days after the end of practical examination.
- (n) The external examiner should assume responsibility of deposit of answer books & award list to the Board.
- (o) Award lists should be signed by both the examiners and should be sent separately through messenger/personally in a double sealed cover and not mixed with the Answer-books. The answer-books can be delivered personally in the Board's office.
- (p) The related material will be collected by the external examiner from the allotted schools.

4. Procedure for Record of Marks in the Practical answer-books.

The examiner will indicate separately marks of practical examination on the title page of the answer-books under the following heads:-

d) Viva based on Project and Practical file - 5 marks

The teacher conducting the final practical examination may ask verbal questions related to the project, done by the student.

e) Practical File/ Report / Assignment / Power Point presentation -10 Marks

Students to make a power point presentation / assignment / practical file / report.

f) Demonstration of skill competency in Lab Activities - 15 marks

Activities to be suggested by both the examiners, to be conducted on practical day.

CLASS XII (2019-20) PRACTICAL (Marks 30)

1. List five problems faced by self as food consumer in context to food safety. Suggest solutions to overcome the same.
2. a) Collect labels of any FIVE food products (oils, packaged food, processed food, raw foods, Savoury food.) Study and compare them with mandatory label requirements.
b) Prepare one food label highlighting the following information:
 - Name & trade of the Food product and the List of Ingredient
 - Food labeling requirements for declaring Nutritional Information
 - Declaration of Veg/Non vegetarian
 - Food labeling requirements for declaring Food Additives
 - Food labeling requirements – Date of Manufacture or Packing and Best before or Use By Date.
 - Food labeling requirements – Declaration of Net Quantity
 - Food labeling requirements – Identification of Lot/Code/Batch number
 - Food labeling requirements – “Instructions for use”
 - Specific Requirements and Manner of Labeling of Infant Milk Substitute and Infant Foods.
 - Food labeling requirements for edible oils & fats, permitted food colors and irradiated food
3. Visit any one food point (Dhaba/ restaurant/ school/ business Centre, etc.) and Observe its measure for safe drinking water and general conditions of hygiene around it.

4. Identify food adulteration using common quick tests at household level: using visual and chemical methods; (Milk, Oils and Fats, sugar and Confectionery, Food grains, Spices and Condiments (Turmeric, Corainder, Black Pepper Seeds etc.), Miscellaneous (artificial colour on green peas, malachite green in green vegetables, white powder in iodized salt, coloured dried tendrils of maize cob in saffron, clay in coffee powder, exhausted tea in tea leaves etc.):
5. Plan a meal and modify for the physiology condition – Fever, Diarrhea, Constipation, Jaundice, Hypertension, Diabetes. Prepare a dish.
6. Prepare ORS Solution.

MARKING SCHEME OF PRACTICALS:

- Q-1 To test for the adulterants in the given food sample (using visual and chemical methods) (3 Marks)
- a) Setting of experiment
 - b) Observation & recording
 - c) Inference & result
 - d) Precautions
- Q-2 To prepare a therapeutic diet for a specific physiological condition. (6 Marks)
- Q-3 To prepare ORS solution. (2 Marks)
- Q-4 Preparation of food label in terms of information provided
- OR**
- Problems faced by food consumers (4 Marks)
- Q-5 Practical File / Report / Portfolio & Power Point presentation. (10 Marks)
- Q-6 Viva voce based on Project and Practicals covered. (5 Marks)