

CFN

Certificate Programme in Food and Nutrition

ASSIGNMENTS 1-3
January 2024 and July 2024



School of Continuing Education
Indira Gandhi National Open University
Maidan Garhi, New Delhi -110068

Certificate Programme in Food and Nutrition (CFN)

ASSIGNMENTS 1-3

2024

Dear Students,

You will have to do three assignments in all. Each Tutor Marked Assignment carries 100 marks. The course-wise distribution of assignments is as follows:

Assignment 1 (TMA) - based on CFN -1

Assignment 2 (TMA) - based on CFN -2

Assignment 3 (TMA) - based on CFN -3

INSTRUCTIONS

Before attempting the assignments please read the following instructions carefully.

- 1) Read the detailed instructions about assignments given in the Programme Guide.
- 2) Write your roll number, name, full address and date on the top right corner of the first page of your response sheet(s).
- 3) Write the course title, assignment number and name of the study centre you are attached to in the centre of the first page of your response sheet(s).

The top of the first page of your response sheet should look like this:

	Enrolment No.....
	Name
	Address
Course Title	
Assignment No.....	Date
Study Centre	

- 4) Use only foolscap size paper for your responses and tie all the pages carefully.
- 5) Write the question number with each answer.
- 6) You should write in your own handwriting.
- 7) Submission: The completed Assignment should be sent to the Coordinator of the Study Centre allotted to you.

A Note of Caution

It has been noticed that some students are sending answers to Check Your Progress Exercises to the University for evaluation. Please do not send them to us. These exercises are given to help in judging your own progress. For this purpose, we have provided the answers to these exercises at the end of each Unit. We have already mentioned this in the Programme Guide.

Before dispatching your answer script, please make sure you have taken care of the following points:

- Your roll number, name and address have been written correctly.
- The title of the course and assignment number has been written clearly.
- Each assignment has been written on separate sheets and pinned properly.
- All the questions in the assignments have been answered. Now read the guidelines before answering questions.

GUIDELINES FOR TMA

The Tutor Marked Assignments have two parts.

Section A: Descriptive Questions (60 marks)

Section B: Practical Activities (40 marks)

POINTS TO KEEP IN MIND

You will find it useful to keep the following points in mind:

- 1) **Planning:** Read the assignments carefully. Go through the units on which they are based. Make some points regarding each question and then rearrange these in a logical order.
- 2) **Organization:** Be a little more selective and analytical. Give attention to your introduction and conclusion. The introduction must offer your brief interpretation of the question and how you propose to develop it. The conclusion must summarize your response to the question.

Make sure that your answer:

- a) Is logical and coherent;
 - b) Has clear connections between sentences and paragraphs;
 - c) Is written correctly giving adequate consideration to your expression, style and presentation;
 - d) Does not exceed the number of words indicated in the question.
- 3) **Presentations:** Once you are satisfied with your answers, you can write down the final version for submission, writing each answer neatly and underline the points you wish to emphasize.

ASSIGNMENT 1 (TMA-1)

Course Code: CFN-1

Assignment Code: CFN-1/AST-1/TMA-1/24

For January 2024 session last date of Submission: 30th May, 2024

For July 2024 session last date of Submission: 30th November, 2024

Maximum Marks: 100

Assignment-1 consists of two parts and is of 100 marks. The weightage given to each part is indicated in the brackets.

A) Descriptive Type Question (60 Marks)

B) Practical Exercise (40 Marks)

Part A: Descriptive Type Question (60 Marks)

All questions are compulsory

1. a) What are nutrients? Enlist the nutrients required by our body? (1+2)
b) Enumerate on any one factor from each of the following: (3)
 - i) Socio-cultural factors influencing food selection.
 - ii) Physiological factors influencing food selection.
 - iii) Psycho-social factors influencing food selection.
2. a) Briefly describe the physiological functions of food. (3)
b) Enlist the major functions of the following: (3)
 - i) Carbohydrates
 - ii) Fats
 - iii) Water
3. a) Why is Vitamin C called the 'fresh food Vitamin'? Explain giving examples of rich sources of Vitamin C. (3)
b) Briefly state the functions and effects of deficiency of the following nutrients in our body: (3)
 - i) Vitamin A
 - ii) Iodine
 - iii) Iron
4. a) Comment on the following briefly: (2+2+2)
 - i) Basic Food Groups
 - ii) Mutual supplementation of certain foods in our diet increases their nutritional value.
 - iii) Nutritional adequacy of Indian diets. (3)

- b) Explain briefly the effect of pre-cooking methods on quality of food giving appropriate examples.
5. a) State the general rules of food hygiene to be observed while cooking and handling food. (3)
- b) Enumerate the following: (2+2+2)
- i) Causes of food spoilage
 - ii) Chemical preservation of food
 - iii) Points to be kept in mind while selecting cereals.
6. a) Comment briefly on the following: (3)
- i) Fermentation and sprouting improves the nutritional quality of pulses.
 - ii) Changes in fats and oils on heating.
 - iii) Properties of sugar
- b) 'Curds are equally nutritive as milk but more easily digestible'. Justify this statement. (3)
7. a) 'Eggs have a wide variety of uses in food preparation'. Discuss briefly the various uses of eggs in our daily diet, giving examples. (3)
- b) Describe the methods you would adopt for minimizing the nutrient losses while cooking vegetables. (3)
8. a) What points will you keep in mind while selecting fruits? How can you prevent browning of cut fruits? (3)
- b) State the importance of spices and condiments in our diet. Explain the uses of salt and 'garam masala' in our daily cooking. (3)
9. a) Elaborate on the following: (3)
- i) Carbonated beverage
 - ii) Adulterant found in chana dal/ besan.
 - iii) Constituents of tea.
- b) What are Convenience foods? What information is mandatory on a label of convenience foods?

(3)

PART B (Practical Exercises)**(40 Marks)****There are four exercises in this part. You must attend all the questions.**

1. What are the preparations made in your home in the following occasions / (10) situations? Write the cooking method used and the nutritive content of each of these preparations. (Refer to Unit 1 & Unit 8)
 - a) Guest Meal
 - b) Introduction of first solid food for a baby (Annaprasana)
 - c) Pregnancy (7th Month)
 - d) Festivals- Diwali / Eid , Sankranti
2. List what you ate for breakfast, lunch and dinner yesterday. Classify them into (10) energy giving, body building, protective/ regulatory foods. Give three suggestions for improving the menu. (Refer to Unit 5).

S.No	Meal	Energy Giving	Body Building	Protective / Regulatory

3. Visit a Food Business Operator (FBO) in your locality. Observe and record the (10) following practices related to food hygiene. Identify the right and wrong practices and suggest modifications to correct them. (Refer to Unit 9). Present your answer in tabular form.

Practices	Right	Wrong	Suggestions for modifications
Food preparation			
Food service			
Storage of food and water			
Storage of leftovers			
Disposal of food waste			

4. List the millets commonly consumed in your region. Give the method of (10) preparation of two traditional millet recipes from your region. Give the nutritional value of the recipes. Enlist ways to incorporate millets in your daily diet. (Refer to Unit 11)

ASSIGNMENT 2 (TMA-2)

Course Code: CFN-2

Assignment Code: CFN-2/AST-2/TMA-2/24

For January 2024 session last date of Submission: 30th May, 2024

For July 2024 session last date of Submission: 30th November, 2024

Maximum Marks: 100

Assignment-2 consists of two parts and is of 100 marks. The weightage given to each part is indicated in the brackets.

A) Descriptive type question (60 marks)

B) Practical Exercise (40 marks)

Section A: Descriptive Type Questions (60 Marks)

All questions are compulsory

1. a) Briefly explain the regulatory functions of food, giving examples. (3)
b) What is RDA ? How does it help in planning balanced diet ? (1+2)
2. a) Classify the activity performed by individuals. Indicate the activity group to which the following people belong: (3)
i) College Lecturer
ii) Paper Delivery man
iii) Loader in the dock (3)
b) Elaborate on the body building food group, highlighting the foods included in the group, the size of one serving and the suggested number of servings for a sedentary man.
3. a) How do enzymes assist in digestion ? Explain the process and the enzymes involved in the digestion of protein, carbohydrates and fats. (6)
b) Explain briefly the critical growth periods, giving examples. (3)
4. a) Present the WHO classification for body mass index (BMI) for categorizing adults into different grades of malnutrition. (2)
b) List any four common nutrient deficiency disorders affecting children in our country. What are the consequences of these disorders and what measures would you adopt to prevent them ? (4)
5. a) "Energy requirements of adults are based on physical activity and age." Justify the statement highlighting the energy needs. (3)
b) Enlist the nutrient requirement for energy, protein, iron and calcium for a lactating women. Enlist the points you will keep in mind to meet the requirements. (4)

6. a) Enumerate the importance of breastfeeding and present the guidelines for introducing complementary foods in the diet of infants. (1+2)
- b) Why are snacks important in the diet of preschoolers ? Suggest two nutritious snacks for preschoolers giving the nutritional contribution of these snacks in the diet of preschoolers. (1+2)
7. a) State the nutritional requirements of school age children. How will you meet their nutrition needs ? (2+2)
- b) Enlist the factors that influence adolescents' food habits. Outline the problems that might affect their nutritional status. (2+2)
8. a) Briefly explain the factors affecting nutritional requirement of elderly. (3)
- b) Briefly explain the following: (3)
- i) Nutrition related problems during pregnancy.
- ii) Dietary Assessment Methods and significance
- iii) Growth monitoring and its relevance
9. a) How does convenience of food preparation affect food habits ? (3)
- b) List the misinformation/fallacies you have come across with regards to the following foods: (3)
- (i) Cereals and Cereal products
- (ii) Water
- (iii) Oils and Fats

Section B – Practical Exercises

(40 marks)

1. Enlist the vegetables and fruits you like from Group 3(Protective and regulatory food group). Prepare a list of vegetables and fruits which are in season and the price per kilogram of the same. List the advantages of buying seasonal fruits and vegetables and state the importance of fruits and vegetables in our diet (Refer to Unit 3). (10)

S.NO.	Name of fruit/ vegetables	Price/ kg

2. Record the weight of a 4 or 5 year old child from each of these: a low, middle and high income group family. Plot their weights on the growth chart (Refer to Growth chart given on Page 74 and 75). Record your observation on the growth status of these three children. (10)

3. Record the food intake of an elderly person in your neighbourhood and answer the following questions after analysing their food intake. (Refer to Unit 14) (10)

Name:

Height:

Age:

Weight:

Gender:

BMI:

S.No	Meal	Menu	Amount

- i) Have they included foods from all food groups?
- ii) What are the number of servings from each group?
- iii) Do they meet their daily requirement?
- iv) What advice will you give them for modifying their diet, within the same budget?

4. Visit any one pregnant women in your neighbourhood. Record her food intake, age, month of pregnancy, income group, weight, height, food habits and state the number of servings she has consumed of the following: (Refer to Unit 8) (10)

- Cereals and Millets:
- Protein Foods:
- Protective Foods:
- Other Vegetables

- Oil, Butter and Ghee
- Sugar and Jaggery

Name:

Height:

Age:

Weight:

Income Group:

BMI:

Month of Pregnancy:

Food Habits:

S.No	Meal	Menu	Number of Servings

Comment if her diet is nutritionally adequate or not, suggest modifications that she should make to have a well balanced diet?

ASSIGNMENT 3 (TMA-3)

Course Code: CFN-3

Assignment Code: CFN-3/AST-3/TMA-3/24

For January 2024 session last date of Submission: 30th May, 2024

For July 2024 session last date of Submission: 30th November, 2024

Maximum Marks: 100

Assignment-3 consists of two parts. Total marks is 100. The weightage given to each part is indicated in the brackets.

A) Descriptive Type Question (60Marks)

B) Practical Exercise (40Marks)

Part A: Descriptive Type Question (60 Marks)

1. a. Define food budgeting. Discuss the factors you would consider while preparing a food budget for a food service unit. (1+3)
b. Explain the following briefly : (2+2+2)
 - (a) Importance of kitchen garden in food production.
 - (b) Livestock form a very important source of production of food.
 - (c) Foods from water.
2. a) Elaborate on the three distinct ration cards issued under the TPDS. (3)
b) What are the components of food subsidy? What are its benefits to the consumer ? (3)
3. a) Explain the non-product specific agricultural subsidy granted by the Government. (5)
b) Give the objectives and the components of the National Agriculture Policy. (3)
4. a. What is a poultry enterprise ? List the Government schemes or programmes launched by the Government for poultry development. (1+2)
b. Differentiate between 'Capture fisheries' and 'Culture fisheries', highlighting their types and categories. (3)
5. a. What do you understand by a dairy enterprise? Explain briefly how Operation Flood has helped farmers in income generation. (1+3)
b. Briefly explain the following: (3)
 - i. Products of a poultry farm
 - ii. Government programme for cattle development
 - iii. Role of ATMA
6. "Different types of supplementary feeding programmes have evolved over the years to combat malnutrition." Comment on the statement highlighting the different programmes and their supplementary feeding components. (6)

7. a) What is the importance of grading food ? On what basis are fruits and vegetables graded ? (1+2)
- b. What are food laws ? List the main objectives of the Food Safety and Standards Act, 2006 ? (1+2)
8. What is food adulteration ? Describe the hazards posed by adulterants present in food as well as the economic loss to the consumer. (1+3)
9. a) Discuss the role of the following in educating the consumers : (2+2)
- i. Media
- ii. Consumer protection groups
- b) What are the rights of consumers which the Consumer Protection Council strives to promote and protect ? (3)

PART B (Practical Exercises)

(40 Marks)

There are four exercises in this part. You have to attempt all the questions.

1. Visit a fair price shop and another regular retail shop in your locality and record the prices at which the following commodities are sold in these two shops (Remember the quality of commodity selected in these two shops should be the same). Comment on your observation. (Refer to Unit 3) (5)

Commodity	Price at Fair Price Shop	Price at Retail Shop
1) Rice		
2) Wheat		
3) Suji		
4) Sugar		
5) Maida		
6) Mustard Oil / Refined Oil		

2. a) Visit your nearest Primary Health Centre / Mohalla Clinic and record the ante-natal and post-natal services provided to pregnant and lactating women under the ICDS scheme. (5)
- b) Visit any Anganwadi centre (under ICDS) near you and enlist the activities carried out and the beneficiaries availing the facilities. (10)
3. Prepare a plan for a model kitchen garden. Give details of different fruits and vegetables which can be grown in the summer season. (Refer to Unit 2) (10)

4. Collect three different samples (**packed and loose both**) of milk, turmeric, yellow dal and coffee powder and carry out simple tests to detect adulteration at home (Refer to [DART Book \(fssai.gov.in\)](http://DART Book (fssai.gov.in))). (10)

Record your observations in the following format:

Milk	Packed / Loose	Adulterant	
		Water	Detergent
M1			
M2			
M3			

Turmeric	Packed / Loose	Adulterant	
		Lead Chromate	Artificial Colour
T1			
T2			
T3			

Yellow Dal	Packed / Loose	Adulterant	
		Khesari Dal	Colour
D1			
D2			
D3			

Coffee Powder	Packed / Loose	Adulterant	
		Clay	Chicory Powder
C1			
C2			
C3			