

DNHE

Diploma Programme in Nutrition and Health Education

**DNHE-1: Nutrition For the Community
ASSIGNMENT- 1**

**January 2025
and
July 2025**



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

Diploma Programme in Nutrition and Health Education (DNHE)

ASSIGNMENT- 1 2025

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 DNHE-1

Assignment 2 (TMA) - based on DNHE-2

Assignment 3 (TMA) - based on DNHE-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 have 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)

In this section, you have to answer questions of descriptive type.

Section B: Practical Activities

(40 marks)

You would be required to submit your responses to activities given in Practical Manuals 1, 2 and 3 respectively.

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: DNHE-1

Assignment Code: DNHE-1/AST-1/TMA-1 /25

For January 2025 session last date of Submission: 30th May, 2025

For July 2025 session last date of Submission: 30th December, 2025

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) Application Question (AQ) (40 Marks)

Part A: Descriptive Type Question (60 Marks)

All questions are compulsory

1. a) Elaborate the various functions of food. (3)
b) Describe the functions of carbohydrates. Briefly explain the process of digestion of carbohydrates. (1+2)
2. a) Enumerate the functions of proteins and fats in our body. (2+2)
b) Differentiate between water soluble and fat soluble vitamins, giving examples. (2)
3. a) What are the factors influencing the absorption of iron in the body? (2)
b) Briefly explain the guidelines you will use to plan balanced diets. (4)
4. a) Discuss the concept and aims of meal planning. Identify the factors that need to be considered in meal planning. (1+3)
b) How will you estimate energy requirements of an adult man ? (2)
5. a) What are the nutrient requirements during the last trimester of pregnancy? Give the RDA. (3)
b) What is ARF ? Why do we use ARF in the context of complementary feeding ? (1+2)
6. a) Discuss the major considerations you will keep in mind while feeding adolescents. (3)
b) What points would you consider to bring about economy in food budgeting ? (3)
7. a) Give the classification of food based on perishability. Give examples of food in each category. (3)
b) Differentiate between food contamination and food adulteration, giving examples. (3)
8. a) Enlist the causes and preventive measures of the following nutritional deficiency disorders : (2+2)
(i) Anaemia
(ii) Vitamin A deficiency.
b) What are the clinical features of the deficiency of Vitamin D in children and in adults? (2)
9. Discuss the clinical features and dietary management of the following disorders:
(i) Obesity (2+2+2)

- (ii) Hypertension
(iii) Diarrhoea
10. a) List any two welfare programmes implemented by the Government for children. (2+2)
Describe their objectives and components.
b) What do you understand by the terms 'Growth monitoring' and 'Growth faltering' ? (2)

Section B – Application Question (AQ)

(40 marks)

1. Suvarna is pregnant. She has been asked by her doctor to eat energy/ protein rich snacks (providing at least 500 kcal energy and 8-10 gm protein per serving) in between the main meals. Given below are names and ingredients of some snacks gathered by her from the various resources. Using the food composition tables, calculate the energy and protein content of these snacks and indicate which of them is suitable / not suitable for her. (10)
- (i) Besan-spinach cheela (Besan-50 g, spinach-50 g, onion-30 g, oil-10 g)
(ii) Bread roll (Bread 2 large pieces (60 g), potato- 60 g, onion-20 g, oil 20 g)
(iii) Idli sambhar (Rice-25 g, Urad dal-10 g, Arhar dal-10 g, onion-10 g, carrot-10 g, oil-5 g)

Use the following proforma to record your results for each of the recipe:

Name of the Dish- Besan Spinach cheela / Bread roll / Idli sambhar

Ingredients	Amount (g)	Energy (Kcal)	Protein (g)

Total energy content _____ kcal, Total protein content _____ gm.

The dish is suitable/not suitable for Suvarna (put a tick mark against the right choice)

(Refer to DNHE 1, Vol 2, Practical Manual -Part 1, Section 2)

2. Based on the steps involved in planning balanced diet, prepare a diet for a moderately active man belonging to low socio-economic group. (Refer to DNHE 1, Vol 2, Practical Manual - Part 1, Section 6-Planning Diet-II) (10)
3. Piyush is the son of Mohinder Singh and Rajwati. He was born on 2nd July 2023. His weight (10)

in different months was as follows:

July 3.3 kg
August 4.0 kg
September 4.8 kg
October 5.3 kg
November 5.8 kg
December 6.0 kg

Plot these weights on the growth chart. What is the direction of growth curve from birth until December 2023? What would you tell Piyush's mother during this time? (Refer to DNHE 1 Vol 2, Unit 25)

4. Visit a primary school in your area providing Mid Day Meal to primary grade students. Collect information regarding the cyclic menu, nutritional norms and cost per child for the menu being supplied at the School. Comment on the nutritional adequacy of the menu being supplied in the Mid-day meal and also give your suggestions on how to improve the menu. Record your observations in the format given below:

Name of the School: _____

Grade: _____

Nutritional Norms: Energy _____ kcal , Protein _____ gm

Food Norms (Per Child per day):

Food Grains	
Pulses	
Vegetables	
Oil & Fat	
Salt & Condiments	
Cost	

Month: _____

Date	Day	Menu
	Monday	
	Tuesday	
	Wednesday	
	Thursday	
	Friday	
	Saturday	