

Food Nutrition & Dietetics Sample Paper 2024

Max. Time: 3 Hours

Max. Marks: 60

Section A: Objective Type Questions

1. Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)

i. What will you do to select an entire worksheet in a spreadsheet?

Ans: To select an entire worksheet, click the grey rectangle on the upper left corner of the worksheet.

ii. What is the shortcut key to underline text in a spreadsheet?

Ans: Ctrl+U

iii. What do you understand by attitude?

Ans: An attitude is a way of thinking or feeling about something.

iv. Define neuroticism.

Ans: Neuroticism is a trait wherein individuals show a tendency towards anxiety, self-doubt, depression, shyness, and other similar negative feelings.

v. Why is the Big 5-factor model of personality important?

Ans: It helps in describing an individual's personality.

vi. Who is a first-generation entrepreneur?

Ans: First-generation entrepreneurs are those who do not have any entrepreneurship background.

2. Answer any 5 out of the given 7 questions (1 x 5 = 5 marks)

i. What are the two major types of liquid diet?

Ans: Clear liquid diet & full liquid diet.

ii. Calculate the BMI of an Indian female (30 years of age) who weighs 60kg and height is 1.4 meters.

Ans: $60/1.4 \times 1.4=30.6$

She is overweight.

iii. Name two important ingredients found in the Oral Rehydration Solution (ORS) as suggested by WHO.

Ans: Sodium chloride & sugar

iv. Why is hypertension known as a silent killer?

Ans: It shows no or quite late symptoms.

v. What is the range of bilirubin levels in a patient of jaundice?

Ans: 2-2.5mg/dl

vi. List any two good personal hygiene habits.

Ans: Washing hands with soap, changing into clean clothes

vii. Write down two reasons for foodborne disease.

Ans: Consumption of food obtained from infected plants or animals.

Food that is handled in an unhygienic way

3. Answer any 6 out of the given 7 questions (1 x 6 = 6 marks)

State whether the following statements are true or false. In case a statement is false, write the corrected statement

i. A bland diet is made of foods that are soft and includes spices and condiments.

Ans: False. A bland diet is made of foods that are soft and includes less/no spices and condiments.

ii. Children with obesity are also at a higher risk of type 2 diabetes.

Ans: True

iii. Integrated Pest Management (IPM) is an ecological approach to crop suppression.

Ans: False. Integrated Pest Management (IPM) is an ecological approach to pest suppression.

iv. Stroke is a condition when part of the brain is deprived of carbon dioxide.

Ans: False. Stroke is a condition when part of the brain is deprived of oxygen.

v. Biological hazards include sharp or hard objects.

Ans: False. Biological hazards include microbes.

vi. Central obesity is known to decrease insulin resistance

Ans: False. Central obesity is known to increase insulin resistance.

vii. Food illness generally affects respiratory tract.

Ans: False. Food illness generally affects the gastrointestinal tract.

4. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)

i. Give any two examples of therapeutic diet.

Ans: Gluten-free diet, purine-rich diet.

ii. What is meant by diet therapy?

Ans: Diet therapy is a branch of dietetics concerned with the use of food for therapeutic purposes.

iii. Expand the abbreviation DOTS.

Ans: Directly Observed Treatment Short Course

iv. What makes water potable?

Ans: It is free from pathogenic bacteria It contains dissolved salts or minerals

v. What is a starvation syndrome?

Ans: Starvation caused either by food restriction/dieting as in anorexia nervosa or problems related to food absorption.

vi. Define the terms

a) Polydipsia b) Polyuria

Ans: a) Polydipsia: Feeling of thirst

b) Polyuria: excessive urinary output

5. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)

The following questions consists of two statements- Assertion (A) and Reason(R).

Answer these questions selecting appropriate option given below:

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not a correct explanation of A
- c) A is true, but R is false
- d) A is false, but R is true

i. A: The soft diet provides a transition between a liquid and a normal diet

R: It is given to a patient when he has to give up a full liquid diet but is yet not able to digest a normal diet.

Ans: a) Both A and R are true, and R is the correct explanation of A

ii. A: Typhoid is caused by the Salmonella typhi.

R: It is also called as enteric fever.

Ans: a) Both A and R are true, and R is the correct explanation of A

iii. A: The particular cause of eating disorders is known.

R: It includes multidimensional causative factors.

Ans: d) A is false, but R is true

iv. A: Multi-grain chapati has low GI.

R: It is beneficial for diabetic patient.

Ans: a) Both A and R are true, and R is the correct explanation of A

v. A: *Salmonella* infection affects the intestinal tract.

R: It is a viral infection.

Ans: c) A is true, but R is false

vi. A: Hygiene is the most important factor in order to prevent food illness.

R: It is very important for food handlers to follow the high standard of food hygiene.

Ans: a) Both A and R are true, and R is the correct explanation of A

6. Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)

i. Identify the diseases in which following diets are prescribed:

a) Purine restricted diet

b) Sodium restricted diet

Ans: a) Purine restricted diet: gout

b) Sodium restricted diet: Hypertension

ii. Determine the cooking method shown in the picture shown below.



Ans: Baking

iii. Write the full form of HbA1c.

Ans: Glycosylated hemoglobin

iv. What is parenteral feeding?

Ans: Feeding fluids containing water, glucose, amino acids, minerals, and vitamins are given through the peripheral and central veins.

v. Expand HACCP

Ans: Hazard Analysis Critical Control Point

vi. Name the bacteria often present in raw eggs.

Ans: *Salmonella*

Section B: Subjective Type Questions

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)

Answer each question in 20 – 30 words.

7. Describe the ways you can make positive thinking a habit in life.

Ans: Physical exercise and fresh air, Healthy diet, Adequate sleep(any2)

8. Entrepreneurship is considered to be both an art and a science. Comment.

Ans: For a subject to be considered as science, it needs to have a stepwise progression substantiated by valid proof like chemistry or physics. Some subjects are categorised as art, where no specific way to attain a result is required and the skill of using the subject matter is of prime importance

9. How will you describe a personality disorder?

Ans: A personality disorder is a way of thinking, feeling and behaving that deviates from worldly expectations and causes distress, which lasts over time.

10. Name an entrepreneur you admire and what do you admire about the person.

Ans: Any start up entrepreneur.

11. How will you add values using Sum () function?

Ans: To add numbers, we have the Sum() function. This helps in adding the numbers in separate cells or in a cell range. Type '=Sum(' in E2 where you want the total.

Answer any 3 out of the given 5 questions in 20 – 30 words each (2 x 3 = 6 marks)

12. Discuss the role of dietician in 'Nutrition care'.

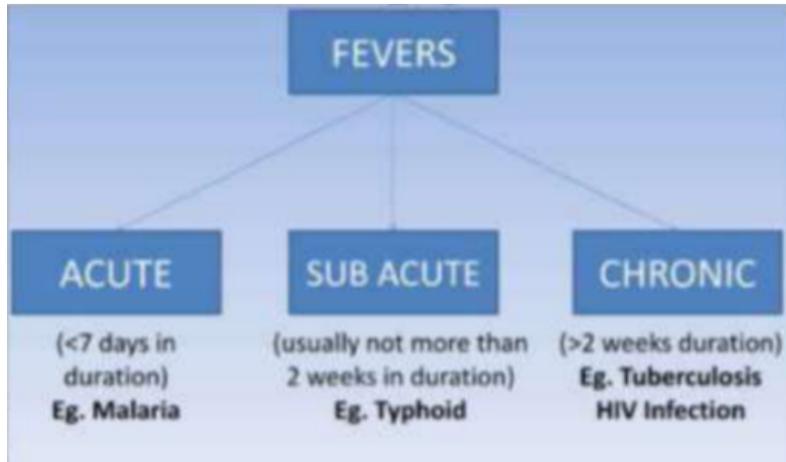
Ans: 1. Collecting, organizing, and assessing the data related to the health and nutritional status of individuals.

2. Review and analyze patients' nutritional requirements

3. Calculate the nutritional value of food/meals planned. (any 2)

13. Draw a flowchart to show the classification of fevers.

Ans:



14. Differentiate between anorexia nervosa and binge eating. (Any 2 points)

Ans: Anorexia- Profound Weight loss, Dieting, denying hunger, and an intense fear of weight gain.

Binge-eating seeking in the absence of hunger, Excessive eating, A sense of lack of control over eating. (any2)

15. How does hypertension cause damage to kidney and heart?

Ans: Damage to Kidneys-high BP can damage large arteries leading to the kidney and the tiny blood vessels within the kidney. As a result, kidneys are unable to filter extra fluid/waste, leading to kidney failure.

Damage to the heart-It affects the arteries that supply blood to the heart muscles. strain on the heart caused by high BP can cause the heart muscle to weaken and work less efficiently. This causes the ventricle to thicken and stiffen, limiting the ventricle's ability to pump blood, thus increasing the risk of heart attack, heart failure, or sudden death.

16. Write a brief note on diabetic ketoacidosis.

Ans: Ketoacidosis is a serious complication of diabetes that occurs when the body produces high levels of blood acids called ketones. When the ketones produced are more than what the body can handle, they accumulate in the blood, resulting in ketoacidosis.

Answer any 2 out of the given 3 questions in 30– 50 words each (3 x 2 = 6 marks)

17. Define malnutrition. List its effects on infection.

Ans: Malnutrition is an impairment of health resulting from a deficiency or lack of food/nutrients or an imbalance of nutrients in the diet.

- a) Lowered Immunity
- b) Effect on the integrity of skin and mucous membrane.

18. What are the dietary management of tuberculosis? (Any 6)

Ans:

- Encourage patients to consume six smaller meals per day instead of three.
- Make the meals appetizing in appearance and taste, and provide enough energy and protein.
- Commercially available high-energy and protein drinks (balanced in terms of micro- and macronutrients).
- Household ingredients such as vegetable oil, sugar, peanut butter, eggs, and non-fat dry milk powder can be used in porridge, soups, milk-based drinks, and gravies.
- At least 500ml to 1 liter of milk (or milk products like yoghurt, soft cheese) should be consumed daily to ensure suitable intakes of vitamin D and calcium.

19. “Rani is a 2-year-old girl. She has a history of frequent passing of stools, but they are well-formed. Her mother is worried.”

a) Is Rani suffering from diarrhea?

b) List any two symptoms of diarrhea.

c) How is diarrhea different from dysentery?

Ans:

a) No

b) Watery, thin or loose stools, Abdominal cramps.

c) Dysentery is with blood, with or without mucus, dysentery is acute diarrhea for 14 days.

Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)

20. What are the moist heat methods of cooking? Explain any two methods.

Ans: In this method, the heat generated by water in some form or another is used for cooking.

1. Boiling: Food items are cooked by placing them in boiling water at 100°C, and this temperature is maintained till the desired stage of cooking has been reached. Rice, pulses, and potatoes are cooked this way.

2. Pressure Cooking

In this method, the food is cooked under pressure, and with the increase in pressure, the temperature also correspondingly increases. Thus, the food is cooked relatively fast. Pressure cooking is a type of steaming in which water is boiled under high pressure, thus raising the temperature and reducing the cooking time.

21. a) Give the detrimental effects, obesity has on health.

b) What would be your proposal to stop the increasing rates of obesity in school children?

Ans: a) obese, particularly abdominal obesity, Frequent and increased/excessive urinary output (Polyuria), Feeling of thirst (Polydipsia) and dry mouth, Increased hunger or appetite (Polyphagia) even though the individual is eating.

b) What would be your proposal to stop the increasing rates of obesity in school children?

22. Mention the foods to be avoided and to be taken liberally for a diabetic patient. (Any 4 each)

Ans: Foods taken liberally: Green leafy vegetables like spinach, Vegetables like cauliflower, brinjal, lady finger, High-fiber foods, fenugreek, pepper, etc.

Foods to be avoided: maida, suji, white bread, white rice, pasta, gelatin-based desserts, sugars, sweets, honey, candy, jam, and jellies.

23. Plan a sample menu for a person suffering from hypertension. (Energy requirement - 1700kcal diet chart)

Ans:

Early Morning	Breakfast	Mid-Morning	Lunch	Tea/Evening snack	Dinner	Bedtime
1 Cup Tea / Coffee (prepared with skim milk & 1 tsp sugar only) OR Lime Juice (in water with honey)/ Coconut Water + Biscuits (2)	Toned Milk (1 glass) Poha/Upma/Corn flakes/Dalia/ (1Katori) OR Bread (2) with Egg (1) jam or white Butter (5gm) OR Ragi idli (2 piece) OR Chapati – 1 with vegetable, Fruit-1	Soup (dudhi / mix veg / tomato) OR Coconut Water/ Lime Juice, OR Fruit Chaat (1 bowl)	Chapati – 1, Rice – 1 Katori, Dal – 1 Katori OR 1 Medium size piece of Chicken or Fish in gravy Veg – 1 Katori (Dark green leafy veg & Yellow- orange veg), Curd – 1 Katori 1 Bowl raw veg Salad with sprouts	1 Cup Tea / Coffee (prepared with skim milk & 1 tsp sugar only) OR Lime Juice (1 glass), High fiber Biscuits (2) OR Roasted Chana/ Sprouts Salad	Chapati – 1, Rice – 1 Katori, Dal – 1 Katori OR (Paneer – 50 gms/ meat/chicken gravy dish) Veg – 1 Katori, Curd – 1 Katori 1 Bowl raw veg Salad with sprouts	Milk – 1 Cup (no sugar)

24. Explain the cause and preventive measures of the following:

a) Cholera

b) Salmonellosis

Ans:

- **a) Cholera:** *Vibrio cholerae* is usually found in food or water contaminated by feces from a person with the infection. Since dehydration is the most common manifestation of cholera, the very first step in the management of cholera is control of dehydration. With rehydration, i.e., by making up losses, fluids, and salts (electrolytes), cholera can now be effectively treated. The rehydration can be oral or intravenous. By this treatment, the death rate due to cholera can be reduced to 1 percent. The World Health Organisation recommends the use of oral fluid.
- **b) Salmonellosis:** *Salmonella* infection (salmonellosis) is referred to as a common bacterial disease that affects the intestinal tract. *Salmonella* bacteria typically live in animal and human intestines and are shed through faeces. Preventive methods are important, especially when preparing food or providing care for infants, older adults, and people who have weakened immune systems. It is very important to cook food thoroughly and refrigerate or freeze food promptly.