CHRISTIAN SOCIAL SERVICES COMMISSION (CSSC)

NORTHEN ZONE JOINT EXAMINATIONS SYNDICATE (NZ-JES)



FORM FOUR PRE-NATIONAL EXAMINATIONS AUGUST 2024

FOOD AND HUMAN NUTRITION 1

MARKING SCHEME

1.

i	ii	iii	iv	v	vi	vii	viii	ix	X
A	В	D	В	С	A	D	С	В	A

1mark @=10marks

2.

i	ii	iii	iv	v	vi
Н	A	D	G	F	В

1 mark @ total of 6marks.

- **3.** i) Health problem related to malnutrition
 - Wasting/Acute malnutrition
 - > Stunting chronic malnutrition
 - Under weight
 - Micronutrients related malnutrition
 - > Inadequate or excessive food intake
- ii) Deficiency diseases are illness caused by lack of essential nutrients in the body over a prolonged period while infectious diseases are disorders caused by harmful organisms that invade the body.

iii) Causes of malnutrition in Tanzania

- Diseases may affect an individual appetite and ability to eat food
- > Shortage of food in the family long term drought or floods affect food production
- > Poor health services sufficient health services are important to ensure good nutrition pand health
- ➤ Poor maternal and child care- Optimal care to children, youth and women protect them from contracting diseases.

1mark @=10marks

- 4. i. Ways may food can be contaminated
- > Cross contamination in food this occurs when microorganisms are transferred from one food item or object to other items
- ➤ **Poor personal hygiene Food** handlers can be source of food contamination if they do not observe person hygiene. Example Touching part of the body especially nose during food preparation, cooking and serving food may lead to food contamination.
- ➤ **Dirty utensils.** The use dirty utensils in preparing, cooking and serving food may contaminate the food
- ➤ **Improper storage of food.** Food contamination can occur if the food is not stored properly e.g., a dirt places an uncovered container and unclean refrigerator.
- ➤ **Poor handling of foods.** Improper handling of food, for example during slaughtering may cause microorganisms found in animals feces and skin to contaminate the meat
- > Use of contaminated water
- > Pests
- > Dirty kitchen
- > Pets and other domestic animals
- ii) Points to observe in order to control food contamination
 - Maintain personal hygiene
 - ➤ Wash utensils with clean water after every use. Use clean utensils in preparing, cooking and serving food
 - Ensure the kitchen is always clean, clean the kitchen immediately after every use

- > Pets and other domestic animals should be kept away from food access areas
- Avoid cross contamination by separating cooked and uncooked food
- > Dried grains should be kept in sealed air tight containers to prevent pest infestation.
- ➤ Keep chemicals or substances which are unfit for human consumption away to prevent them from contaminating the food.
- > Use agricultural and industrial chemicals as per insructions
- Wash groceries

1 marks @=10 marks.

5. i. Qualities of freshness eggs

- ➤ Rough shell surface, especially in its blunt part due to the presence of many pores
- ➤ Be heavy where when help and sunk in cold water.
- ➤ No produce any sound when shaken.
- ➤ Be clear without a dark spot when help against the light, a stale egg has a dark opaque cloud.
- > Have a pleasant egg smell.
- ➤ Have a firm yolk surrounded by the egg white when broken, stale egg has a watery egg yolk.

ii. Water test



This method uses plain water to test the egg, freshness. An egg is placed in a glass of water. If the egg sinks to the bottom, it is quite fresh. If the egg suspends, it is still fine to eat. If the eggs floats to the surface, it is stale. The science behind this is that, as eggs age, the shell becomes more porous.

As a result, they allow more air to enter and the more it does through the shell, the larger the air cell and the lighter the egg.

iii Uses of egg cookery

- Main dish:
- > Thickening agent
- Binding agent
- Coating agent
- Leavening or raising agents
- > Enriching agent
- > Glazing agent
- Garnishing

1 mark @= 10 marks

6. i. Dish meal refers to one prepared item of food like stewed meat or a fruit salad. It can be one two or three dish meals while course meal is a single or set of food items served at a specific point in a meal sequence for culinary and digestion, Eg. First course carrot soup, Main course Ugali, stewed beans, fried vegetables, Third course Or desert (Any sweet dish)

With examples 04 marks

ii) Three main meal per day

Breakfast - The first meal of the day. Usually around 6am-9am eg. French toast, coffee/tea, ice cream/cupcakes

Lunch - A meal in the middle of the day. Usually around noon or 1pm and it is balanced eg, boiled rice, stewed meat, fried vegetables and fruit juice, Or any other relevant examples.

Dinner - The main meal of the day, eaten in the evening. Usually when people say dinner, they mean an evening, around 7pm- 9pm. and it has to be balanced. Eg banana fish stew, vegetable salad and mixed fruit juice.

2 marks @ = 10 marks.

- 7. i. Stock means a liquid which comes from bones and vegetables after prolong simmering process. Or stock refers to flavorful liquid made by simmering bones, vegetables, or both in water for an extended soup.

 2marks
- ii) Ways of preventing stock from turning sour

Temperature control:

Simmering: Maintain the stock rapidly to below 40°C within 2hours

Acidity: adding acidic ingredients like vinegar, lemon can slightly lower the pH of the stock, creating a less favorite environment for some bacteria.

Salting

Salt can inhibit bacteria growth

3marks

- iii) Herbs used in making bouquet garni
 - > Parsley
 - > Thyme
 - > Tarragon
 - > Rosemary chervil
 - Bay leaves
 - > Celery
 - > radishes

½ @= 2 marks

iv. How to use bouquet garni

After tie the herbs/wrap the herbs in cheese cloth/ muslin cloth add to the dish, let it simmers for 30m then remove the bouquet garni and store it in the refrigerator wrapped in a damp paper towel for a day or two. **3marks**

Total 10marks

- 8 i. Method through which air can be introducing in to the flour
 - > creaming
 - Sieving
 - > Folding
 - Whisking
 - Rolling
 - ii. Points to consider when using raising agent
 - > Temperature
 - > Amount of Yeast
 - > Amount of sugar

- > Time
- iii. Effects of using tool little raising agent
 - Lack of lightness in the baked product
 - > Dense
 - Become sad

1 mark @= 10

9. i) Appetizer; this is a food which is eaten before the main meal for the purpose of raising the appetite of the eaters.

2 marks

ii)Horsdouver, cocktail, soup

3 marks

iii) Soup, warm salad, garlic bread, spring rolls,

2 marks

- iv) Functions of appetizer
 - > To arose the appetite
 - > To provide variety
- > To manage hunger

To socialize

3marks

Total 10marks

SECTION C

10. Malnutrition is a condition which results from inadequate or excessive intake of one or more nutrients for a long time. A lack of one nutrient can create a nutritional disorder.

There are three forms of malnutrition namely wasting (Acute malnutrition), stunting (chronic malnutrition), underweight (Acute and chronic malnutrition)

namely under nutrition as well as overweight and obesity. Under nutrition is caused by inadequate energy or other nutrients to meet the individuals need to maintain good health. This can be due to a poor diet or poor absorption of

nutrients in the body. Overweight and obesity is another form of malnutrition which results from consuming more nutrients than nutrients than.

How do elders are mostly likely to suffer from malnutrition; as a person ages, the body system ability to work tend to drop. Several challenges are associated with age and these include loss of taste, ability to smell and appetite. These challenges may increase the risk of malnutrition. Other factors may be poverty, functional disability, dependency rate etc.

Causes of malnutrition in Tanzania, Inadequate intake or excessive intake of food, Diseases, Shortage of food in the family, Poor health services, In adequate of nutrition education, Poor sanitation and hygienic practices, Poor maternal and child care, Conclusion the double burden of malnutrition is a complex issue which many factors. However, it is a preventable issue. Education is going to be one of the ways in which pressure from this issue can be released.

Introduction- 01-mark, main body 13, conclusion 01mark

Total 15 marks

11. CONVENIENCE FOOD

Introduction

Convenience foods are those that are bought partly or complete. There are different types of convenience food dehydrated food, frozen foods, canned food, ready-to-eat foods. These foods are readily available and there is a wide variety from which to choose.

Importance of convenience

- ➤ The food serve time in preparing and cooking thus why can kept for emergency.
- ➤ Are useful for those people who are unskilled and easily prepared.
- ➤ This type of food saves cooks energy and fuel moreover they are fortified during processing therefore give them extra nutrients.
- > Ease of use
- ➤ Help in portion control
- > They are easily available
- > It enhances food preferences

Conclusion

Convenience food offer a valuable solution in our fast- paced world, saving time and effort in meal preparation. They provide variety and cater to busy lifestyles. However, mindful consumption is key. Many convenience foods can be high in sugar, and unhealthy fats. The key is to find a balance between convenience and health choices.

Introduction- 01¹/₂-mark, main body 12marks, conclusion 01¹/₂mark

Total 15 marks

12. PASTRY

Pastry is a dough made from flour, water and salt, used in baking various dishes. There are different types of pastry, each with a different texture and flavour, these are short crust pastry, suet pastry, rough puff, flaky pastry and choux pastry

Short crust pastry - This can be used for sweet or savory dishes. Short crust pastry has a crumbly texture and is often used for pies, tarts, and quiches

Rough Puff pastry -This pastry is known for its light and flaky layers. Puff pastry is used for in croissants, danishes and puff pastry. The fat is rubbed into the flour all at once. Then followed by folding without laminating the mixture with fat

Choux pastry is light and airy. It is used for cream puffs, éclairs and profiteroles. The pastry is in liquid form, it ca not be rolled. It has to be eaten while fresh.

Suet pastry is a dough which used to prepare different items such as meat roly poly, jam layer pudding etc. the source of fat is from the animals. This is hard and tough.

Flaky pastry is a type of pasty whereby fat is divided into four portions. Then one portion is rubbed into the flour. Then followed by folding the mixture with fat lamination.

Introduction- $01^1/_2$ -mark, main body 12 marks, conclusion $01^1/_2$ mark

Total 15 marks