

## End of Year Sample ASSESSMENT ITEMS FOR S.1 AND S.2

# FOOD TECHNOLOGY

2022

### **NUTRITION AND FOOD TECHNOLOGY End Of Year Summative Assessment**

#### Sample Test Items

#### Guidance to the Teacher

These sample test items are intended to guide teachers of Nutrition and Food Technology on how to develop end-of-year assessment items for Senior One and Two. The items presented do not constitute a complete examination paper for the subject.

The assessment at this level will focus on theory. Teachers should ensure that the practical experiences are carried out during the teaching and learning sessions. However, we advise that practical examinations be administered when the learners get to Senior Three.

The learner is expected to attempt all the theory items at this level. To determine the number of items in the theory paper, you should consider the demand of each item on the learner and the duration they can spend providing the required response.

The teacher should benchmark on the samples provided rather than replicate them. Ideally, the examination for this level should not take more than **One** hour and **30** minutes.

Below each item, the learning outcomes assessed are indicated. This is intended to remind the teacher to keep the syllabus learning outcomes in mind while developing the items.

#### Sample Test items for Senior One

#### Sample for short response items

1. The following is a good sequence of activities in the kitchen.

Task: Match the steps and the activity.

Step	Activity		
1	Washing the food		
2	Cooking the food		
3	Preparing the food		
4	Serving the food		
5	Storing the food		

#### (Scores 3)

(This item is developed from the following Learning outcome - understand the factors that need to be taken into account when planning a kitchen.)

#### Sample for Extended Response Items

2. Farmers in your community grow a lot of vegetables due to improved farming methods learnt from Operation Wealth Creation training. Your family too has a lot of vegetables, which you have been selling in the local market and to other traders from the outside market. In the last season, the vegetables were too much that the market in and out of the community would not take them all. The farmers are likely to make great losses and may not be able to purchase seeds and fertilizers for next season.

#### Support:



#### Task

Using your exposure of Nutrition and Food Technology, come up with a writeup of three practical pieces of advice you would give to your community, to minimise losses of the bounty harvest of vegetables. (Scores 10)

(This item is developed from learning outcomes under the fruit processing competency - The learner processes and preserves vegetables using a variety of methods to ensure a longer shelf life.)

#### **Scoring Guide for Senior One**

1. The following is a good sequence of activities in the kitchen. Match the steps and the activity.

Activity
Storing the food
Washing the food
Preparing the food
Cooking the food
Serving the food



Scores 3 for getting all the steps correct; scores 2 for getting at least two steps correct; scores one for getting at least one step correct.

#### Task 2:

#### Assessment Grid

Output	Basis of assessment	Criteria 1 Relevance	Criteria 2 Accuracy	Criteria 3 Coherence	Criteria 4  Excellence
A write- up of 3 practical pieces of advice	Different ways of processing vegetables i.e. making pickles, sauces, drying using the following: - salt	Scores 3: Candidate mentions at least three ways of preserving vegetables  Scores 2:	Scores 3: Candidate explains the use of each of the ways of preserving vegetables  Scores 2:	Scores 3: Candidate logically gives reasons for preserving vegetables using each of the three ways	
	<ul><li>sugar</li><li>oil</li><li>vinegar</li><li>solar</li><li>drying</li></ul>	Candidate mentions at least two ways of preserving vegetables	Candidate explains at least two of the ways of preserving vegetables	Scores 2: Candidate logically gives reasons for preserving vegetables	Candidate earns <b>one</b> point if he/she has added any

Output	Basis of assessment	Criteria 1 Relevance	Criteria 2 Accuracy	Criteria 3 Coherence	Criteria 4  Excellence
	- oven drying - sun drying	Scores 1: Candidate mentions at least one way of preserving vegetables	Scores 1: Candidate explains at least one of the ways of preserving vegetables	using at least two ways Scores 1: Candidate logically gives reasons for preserving vegetables using at least one way	relevant element that was unsolicited for e.g. The type of equipment among others
		3	3	3	1
Total Score		10			



#### Sample Test items for Senior Two

#### Sample for Short Response Items

1. Giving an example of a food in each case, describe the food preparation reactions that result in the following:

i	Coagulation	
iii	Caramelisation	
iii	Gelatinisation	

(3 scores)

(This item was developed from the following Learning outcomes - understand the characteristics of protein foods; understand the characteristics of carbohydrate foods.)

#### Sample for Extended Response Items

 You have been invited to give a practical demonstration on the use of carbohydrate foods in the preparation of three products suitable for breakfast.

#### Task:

Make a write-up of the nutritional value of each of the products and the characteristics observed during the preparation of the products.

(19 scores)

(This item was developed from the following learning outcome - Make, pack, cost and sell snacks.)

#### **Scoring Guide for Senior Two**

1. Giving an example of a food in each case, describe the food preparation reactions that result in the following:

i	Coagulation	When cooking eggs, for example, the application of heat causes a change in the structure of the protein from liquid to solid. The egg solidifies and causes the egg white to become opaque. In other foods like milk, the application of heat causes the protein to coagulate, which in turn causes the milk to turn into a thicker liquid.
iii	Caramelisation	When dry heat is applied on sugar, the sugar melts, turning into a golden syrup. Further heating causes the melted sugar to oxidize and turn brown, changing both the colour and the flavour (caramel flavour) of the sugar. When you heat further, the sugar eventually turns black.
iii	Gelatinization	The application of moist heat to carbohydrates leads to the destruction of the crystalline starch structure into a gel-like sticky substance. This can be evident in the making of porridge, causing the flour paste in hot water to solidify by continued heating.

Scores 3 for giving the correct description and example for all the three processes; scores 2 for giving the correct description of at least two of the processes with examples; scores 1 for giving correct description and an example of at least one process.

2. You have been invited to give a practical demonstration on the use of carbohydrate foods in the preparation of three products suitable for breakfast.

#### Task

Make a write-up of the nutritional value of each of the products and the characteristics observed during the preparation of the products.

#### **Assessment Grid**

Output	Basis of assessment	Criteria 1 Relevance	Criteria 2 Accuracy	Criteria 3 Coherence	Criteria 4
	T1 1 1				Excellence
A write-up on the	Three products and the	Scores 3: Candidate	Scores 3: Candidate	Scores 3: Candidate	
nutritional	nutritional value	mentions at	explains the	logically gives	
value of	of each of the	least three	presence of	reasons for the	
the	products	nutritional	the three	presence of	
products	(determined by	values for	nutritional	the three	
and the	the ingredients	each of the	values in	nutritional	
changes	used in	products	each of the	values in each	
observed	preparing the dishes)	presented	products	of the products	
		Scores 2:	Scores 2:	products	Candidate
		Candidate	Candidate	Scores 2:	earns <b>one</b>
		mentions at	explains the	Candidate	point if
		least two	presence of	logically gives	he/she has
E.		nutritional	the two	reasons for the	added any
III		values for	nutritional	presence of	relevant
	~20000000000000000000000000000000000000	each of the	values in	the two	element
	1	products	each of the	nutritional	that was
	3)///	presented	products	values in each	unsolicited
	3, 1		), §	of the	in the
		Scores 1:	Scores 1:	products	instruction
	$y_{j_1}$ $y_{j_2}$	Candidate	Candidate		
	Mires Vie	mentions at	explains the	Scores 1:	Girran IIII
		least one	presence of	Candidate	HHHHH.
iron Hilling		nutritional	the one	logically gives	
	JULY 21 30 3	value of each of the	nutritional value in each	reasons for the presence of	2 12 12 12 12 12 12 12 12 12 12 12 12 12
	16. 3. A. 4. 4.	products	of the	the one	
	31 /31/31/	presented	products	nutritional	110 11016 110
	37 37	32202 3	93332232	value in each	1. 20 20 20 20 25 E
		20, 32 32 32		of the	37 37
		C 1116 1110 770	111 11 11 11 1111111	products	
	Characteristics	Score 3:	Score 3:	Score 3:	
	observed during	Candidate	Candidate	Candidate	
	the preparation	mentions 5-6	explains 5-6	logically	
	of each of the	characteristics	characteristics	explains 5-6	
	products	observed	observed	characteristics	
	• Starch	during the	during the	observed	
	insoluble in	preparation	preparation	during the	
	water	of the	of the	preparation of	
	Enzymatic	products	products	the products	
	browning	(dishes)	(dishes)	(dishes)	
	Gelatinization	Saaraa O.	Scores 2:	Saaras O.	
	of starch	Scores 2:	Candidate	Scores 2: Candidate	
	Effect of heat     on aluten	Candidate mentions 3-4	explains 3-4 characteristics	logically	
	<ul><li>on gluten</li><li>Dextrinization</li></ul>	characteristics	observed	explains 3-4	
	of starch	observed	during the	characteristics	
	<ul> <li>Melting of</li> </ul>	during the	preparation	observed	
	granulated	preparation	of the	during the	
	sugar	of the	products	preparation of	
			(dishes)		

Output	Basis of assessment	Criteria 1 Relevance	Criteria 2 Accuracy	Criteria 3 Coherence	Criteria 4  Excellence
	<ul> <li>Browning of sugar on heating from golden syrup to caramel</li> <li>Solubility of sugar in water</li> <li>Mailard reaction – heating a combination of carbs and protein</li> </ul>	products (dishes)  Scores 1: Candidate mentions 1-2 characteristics observed during the preparation of the products (dishes)	Scores 1: Candidate explains 1-2 characteristics observed during the preparation of the products (dishes)	the products (dishes)  Scores 1: Candidate explains 1-2 characteristics observed during the preparation of the products (dishes)	
Total Score		3*2 = 6	3*2 = 6	3*2 = 6	1
E.					6+6+6+1=19

