

# HOMWORK QUESTIONS

## HIGHER HFT

Q	✓	Q	✓	Q	✓	Q	✓	Q	✓	Q	✓	Q	✓
1		11		21		31		41		51		61	
2		12		22		32		42		52		62	
3		13		23		33		43		53		63	
4		14		24		34		44		54		64	
5		15		25		35		45		55		65	
6		16		26		36		46		56		66	
7		17		27		37		47		57		67	
8		18		28		38		48		58		68	
9		19		29		39		49		59		69	
10		20		30		40		50		60		70	

PUPIL NAME:

ANDERSON HIGH SCHOOL  
HOME ECONOMICS DEPARTMENT

Updated Jan 2016

## QUESTION 1 - 9 MARKS (ANALYSE)

The table below shows a day's nutrient content of meals eaten by a male toddler.

Nutrient content of a day's meals eaten by a male toddler						
Energy	Protein	Fat	Sugar	Vitamin C	Iron	Calcium
KJ kcal	g	g	g	mg	mg	mg
6270 1500	24.0	67.0	43.0	35.0	5.6	400.0

Reference Nutrient Intake for Selected Nutrients in the UK (per day)				Estimated Average Requirement for Energy in the UK (per day) for males aged 1-3 years.	
Protein (g)	Vitamin C (g)	Iron (mg)	Calcium (mg)	kJ	kcal
14.4	40.0	6.9	350.0	5150	1230

### LUNCH

Pork Meatballs in Tomato Sauce  
Spaghetti  
Glass of fresh orange  
Yoghurt

Using all the information above, analyse three different aspects of the diet of the toddler, in relation to the Dietary Reference Values for males aged 1-3 years

For each aspect of his diet you have identified your analysis should include

- comment on the impact of his diet in relation to DRV's,
- a potential consequence for his health and
- a conclusion about the contribution made by the lunch.

## QUESTION 2 - 9 MARKS (ANALYSE)

The table below shows a day's nutrient content of meals eaten by a woman who is breast feeding.

Nutrient content of a day's meals eaten by a breast feeding woman						
Energy	Protein	Fat	Folic acid	Vitamin C	Iron	Calcium
KJ kcal	g	g	mg	mg	mg	mg
12519 2995	88	91	122.0	58	13	1500

Reference Nutrient Intake for Selected Nutrients in the UK (per day) for a woman breastfeeding (19-50 years)					Estimated Average Requirement for Energy in the UK (per day) for a woman breastfeeding (19-50 years)	
Protein (g)	Vitamin C (g)	Iron (mg)	Calcium (mg)	Folic acid (mg)	kJ	kcal
56	70	14.8	1250	260	10492	2510

## EVENING MEAL

Cream of Tomato Soup  
Roll, butter  
Beef Lasagne, salad, oven baked chips

Using all the information above, analyse three different aspects of the diet of the breast feeding woman, in relation to the Dietary Reference Values for woman breastfeeding (19-50 years)

For each aspect of his diet you have identified your analysis should include

- comment on the impact of his diet in relation to DRV's,
- a potential consequence for his health and
- a conclusion about the contribution made by the evening meal.

### **QUESTION 3 9 marks (ANALYSE)**

The table below shows a day's nutrient content of meals eaten by an inactive obese 40 year old man.

Nutrient content of a day's meals eaten by an inactive obese 40 year old male officer with an inactive lifestyle.

Energy		Protein	Vitamin B1	NSP	Sodium
KJ	kcal	g	mg	mg	mg
12965	3099	81.1	1.0	5	7635

Reference Nutrient Intake for Selected Nutrients in the UK (per day) for 40 year old male				Estimated Average Requirement for Energy in the UK (per day) for a 40 year old male	
Protein (g)	Vitamin B1 (Mg)	NSP (g)	sodium (mg)	kJ	kcal
55.5	0.8	18	1600	10600	2550

### BREAKFAST

Streaky bacon, fried egg and black pudding.  
Tea with whole milk and sugar  
Toast with butter and jam

Using all the information above, analyse three different aspects of the diet of the inactive obese man relation to the Dietary Reference Values for a 40 year old male.

For each aspect of his diet you have identified your analysis should include

- comment on the impact of his diet in relation to DRV's,
- a potential consequence for his health and
- a conclusion about the contribution made by the breakfast.

### QUESTION 4 - 9 MARKS (ANALYSE)

The table opposite shows a day's nutrient content of meals eaten by a 16 year boy who is a vegetarian.

Nutrient content of a day's meals eaten by a vegetarian boy						
Energy		Protein	Vitamin A	Vitamin C	Iron	Calcium
KJ	kcal	g	$\mu\text{g}$	mg	mg	mg
12540	3000	33	375	78	7	1200

Reference Nutrient Intake for Selected Nutrients in the UK for males aged 15-18 (per day)					Estimated Average Requirement for Energy in the UK (per day) for males aged 15-18 years.	
Protein (g)	Vit C (g)	Iron (mg)	Calcium (mg)	Vit A ( $\mu\text{g}$ )	kJ	kcal
55.2	40	11.3	1400	700	11510	2755

#### LUNCH

Macaroni Cheese with chips  
Glass of milk

Using all the information above, analyse three different aspects of the diet of the 16 year old vegetarian in relation to the Dietary Reference Values for a male aged 15-18 years.

For each aspect of his diet you have identified your analysis should include

- comment on the impact of his diet in relation to DRV's,
- a potential consequence for his health and
- a conclusion about the contribution made by the breakfast.

### **QUESTION 5**

Explain four practical guidelines to help reduce the risk of dental caries in a teenager - 4 EX

### **QUESTION 6**

Evaluate the dietary suitability of the following meal for a teenager.

- Sardine pate and whole wheat toast
- Spaghetti Bolognese with broccoli - 4 EV

### **QUESTION 7**

Explain the inter-relationship between each of the following

- NSP and water
- Carbohydrates and Vitamin B complex - 4 EX

### **QUESTION 8**

Evaluate sodium in the diet of an overweight man. - 2 EV

### **QUESTION 9**

Explain five menu planning guidelines to be followed by parents when preparing snacks for toddlers. - 5 EX

### **QUESTION 10**

The following breakfast was eaten by a toddler. Evaluate this breakfast in meeting some of the current dietary advice

- Chocolate coated cereal with milk
- White toast with butter and jam
- Sweetened orange juice - 4 EV

### **QUESTION 11**

Explain the relationship between iron, NSP and phytic acid - 2 EX

## QUESTION 12

Explain the effect of heat on

- Vitamin B1
- Protein - 3 EX

## QUESTION 13 - 9 ANALYSE

The table opposite shows a day's nutrient content of meals eaten by a pregnant woman.

Nutrient content of a day's meals eaten by a pregnant woman							
Energy		Protein	Calcium	Folic acid	NSP	Vitamin D	Iron
KJ	kcal	g	mg	µg	g	µg	mg
8600	2010	65	550	255	12	8	15

Reference Nutrient Intake for Selected Nutrients in the UK (per day) for a pregnant women						Estimated Average Requirement for Energy in the UK (per day) for a pregnant woman	
Protein (g)	Vit D (µg)	Iron (mg)	Calcium (mg)	Folic acid (µg)	NSP (g)	kJ	kcal
51	10	14.8	700	300	18	8770	2140

<p><b>LUNCH</b>  <b>Roast Beef with gravy, peas and potatoes</b>  <b>Glass of milk</b></p>
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Using all the information above, analyse three different aspects of the diet of the pregnant woman, in relation to the Dietary Reference Values for pregnant women.

For each aspect of his diet you have identified your analysis should include

- comment on the impact of his diet in relation to DRV's,
- a potential consequence for his health and
- a conclusion about the contribution made by the lunch.

#### **QUESTION 14 -**

Explain **three** factors, **other than those relating** to diet, which will ensure good health during pregnancy.- 3 EX

#### **QUESTION 15 -**

Explain the inter-relationship of the following nutrients

- Calcium, phosphorus and vitamin D
- Vitamin B complex and carbohydrate - 4 EX

#### **QUESTION 16**

Identify two groups of people, other than teenage girls, who may be likely to suffer anaemia.

Explain why each group may be at risk. - 2 EX

#### **QUESTION 17**

Explain three reasons that account for the low intake of fruit and vegetables by teenagers. - 3 EX

#### **QUESTION 18**

Describe the effects of storage, preparation and cooking on Vitamin C - 3 (DESCRIBE)

## QUESTION 19

Explain four health problems associated with obesity - 4 EX

## QUESTION 20 - 20 MARKS

Each question worth 1 mark

- a. What does the abbreviation HDL stand for?
- b. Describe 2 practical ways of avoiding hypertension
- c. State 2 advantages of breast feeding
- d. Identify two factors other than diet which may contribute to coronary heart disease.
- e. Name 2 fat soluble vitamins
- f. State two factors which affect the energy requirements of individuals
- g. State two dietary factors which hinder calcium absorption
- h. What does the abbreviation CHD stand for.
- i. Explain the term osteoporosis.
- j. Describe 2 ways of preventing dental caries
- k. Give one advantage of following a vegan diet.
- l. Give one disadvantage of following a vegan diet.
- m. State two benefits of exercise.
- n. Give two sources of vitamin D
- o. Give two sources of non-starch polysaccharide.
- p. Give two advantages of increasing oily fish in the diet.
- q. State two ways in which vitamin C is lost during food preparation
- r. State two factors which can hinder the absorption of iron.
- s. What does the term NMES stand for?
- t. State two functions of water in the diet.

## QUESTION 21 - 20 MARKS

Each question worth one mark

- a. Name two sources of HBV protein
- b. What does the abbreviation TVP stand for?
- c. Identify two effects on health which may result from obesity.
- d. Name two fat soluble vitamins.
- e. State two functions of water in the diet.
- f. Identify two factors which may lead to obesity.
- g. What does the abbreviation GM stand for?
- h. State one cause of diverticular disease.
- i. Identify two practical ways of reducing salt intake.
- j. State one function of folic acid.
- k. Name one essential fatty acid.
- l. Identify one function of NSP.
- m. State two dietary causes of coronary heart disease
- n. Give 2 benefits of a school breakfast club.
- o. State two health benefits of a diet rich in the ACE vitamins.
- p. State the function of Vitamin K in the diet.
- q. Give two practical ways in reducing sugar in the diet.
- r. Explain the term amino acid.
- s. State one function of Vitamin C.
- t. Name two water soluble vitamins.

## QUESTION 22 -

The following information is provided on the packaging for a ready made meal.

READY MEAL PER SERVING	
Kilojoules	2060
Total fat	47g
Saturated fat	19g
Total sugar	11g
NSP	8g
Sodium	2g

**Ingredients:** white rice, chicken, cream, onion, peppers, tomato puree, starch, sugar, ginger, salt, spices

Evaluate this meal in relation to current dietary advice. 5 EV

## QUESTION 23 -

Explain three ways of preventing food contamination by *Bacillus Cereus* 3 EX

## QUESTION 24

A food manufacturer plans to develop a bread based snack. Explain four stages in the development of this snack. 4 EX

## QUESTION 25

Evaluate the use of market research in product development. 4 EV

### QUESTION 26

Explain two voluntary points of information found on food labels may benefit the consumer. 3 EX

### QUESTION 27

A food manufacturer plans to develop a cereal bar.

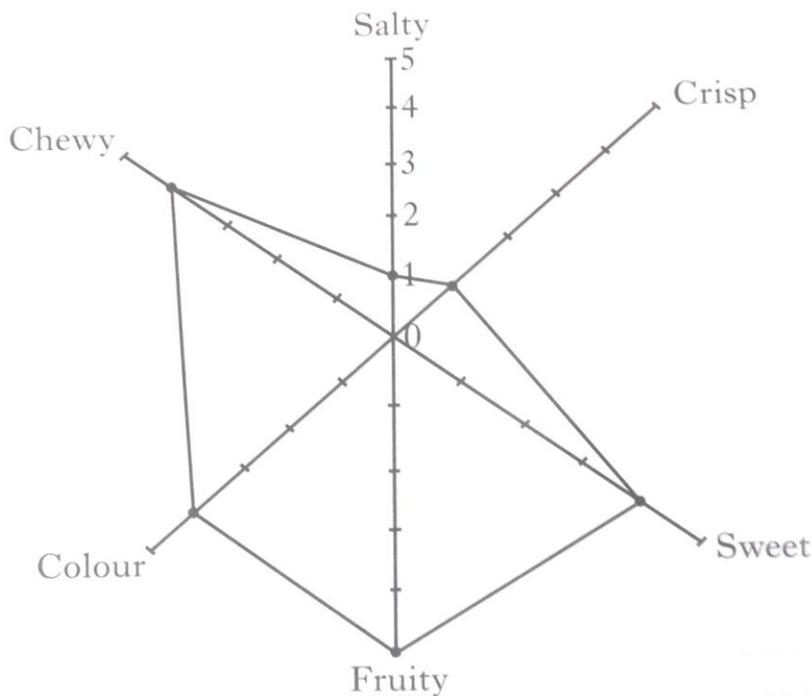
Explain three stages in the development of this snack. - 6 EX

### QUESTION 28

The star profile below shows the results of testing a cereal bar.

Evaluate the suitability of this cereal bar for teenagers. 5EV

Evaluate the suitability of this cereal bar for teenagers.



(c) Explain **two** reasons why a food manufacturer would use disassem

### **QUESTION 29**

Explain two reasons why a food manufacturer would use disassembly when developing a food product. 2 EX

### **QUESTION 30**

The following marketing techniques are used to promote the cereal bar.

- Point of sale display
- Buy one get one free
- In-store tasting
- TV advertising

Evaluate the impact of each of these techniques on the consumer. 4EV

### **QUESTION 31**

Explain one cause and two control measures for each of the following bacteria.

- Salmonella
- Campylobacter 6 EX

### **QUESTION 32**

Identify and explain four different control measures which may help prevent cross-contamination. 4 (EXPLAIN)

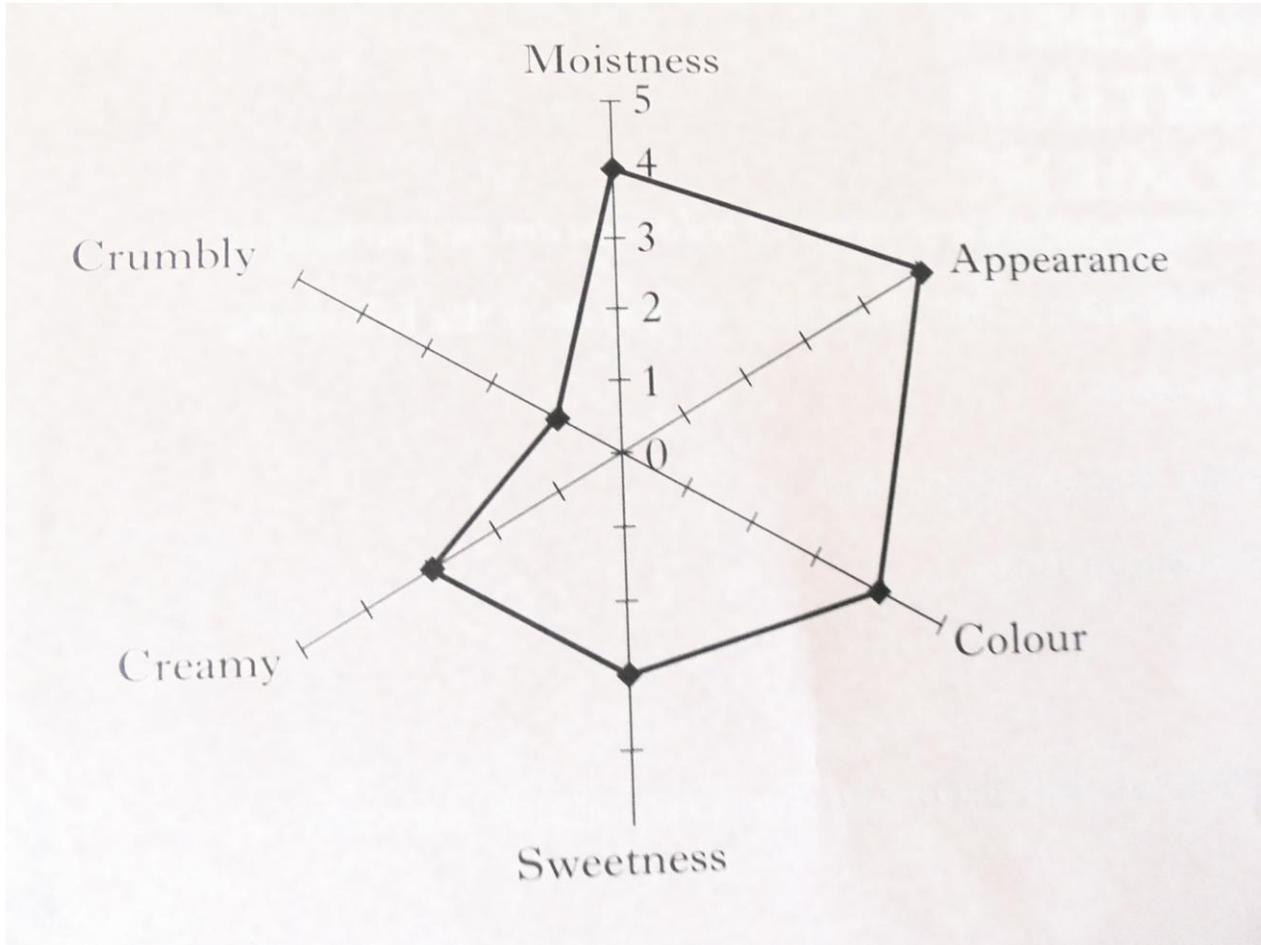
### **QUESTION 33**

Explain each of the following stages in the development of a novelty cake.

- Concept screening
- Prototype production
- First production run
- Launch 4 EX

### QUESTION 34

The star profile below shows results of the testing of a novelty cake. Evaluate the suitability of this novelty cake for a toddler. 5 (EVALUATE)



### **QUESTION 35**

Explain three mechanical methods of introducing air in cake making.

3EX

### **QUESTION 36**

Explain the effects of storage, preparation and cooking on fats

3 EX

### **QUESTION 37**

Explain three ways of preventing food contamination by *Bacillus Cereus*.

3 EX

### **QUESTION 38**

Explain the role of each of the following in food contamination.

- Anaerobes
- Ph
- Spore      3 EX

### **QUESTION 39**

A food manufacturer is planning to introduce a range of low fat desserts. Evaluate each of the following steps of the marketing plan.

- Tasting session in one supermarket chain
- Advert in a slimming magazine
- '50p off' next purchase
- Endorsement by a celebrity chef      4 EV

### **QUESTION 40**

Explain how each of the following factors can bring about change during the processing of a food product.

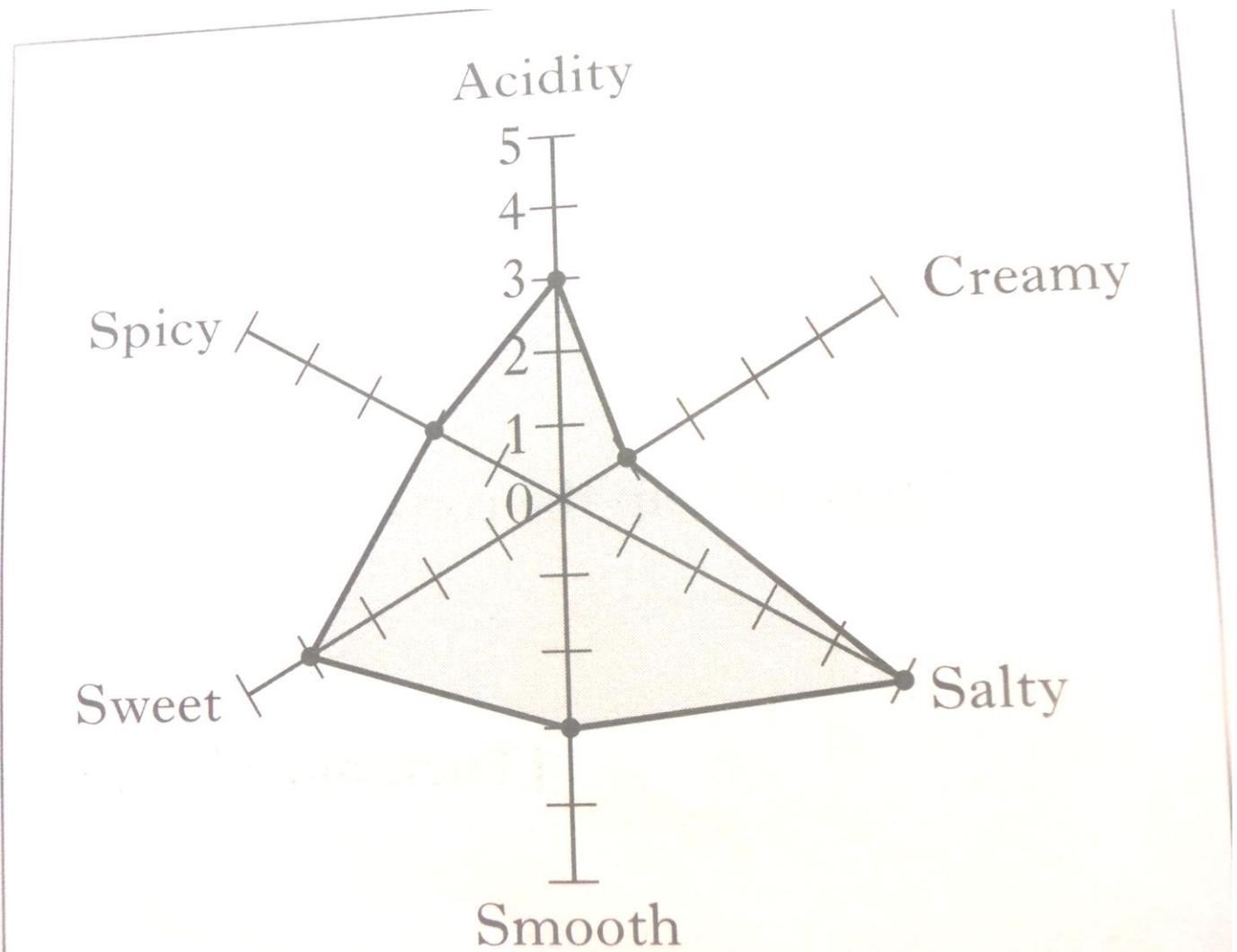
- Heat
- Mechanical action
- Light      3EX

### QUESTION 41

Explain four procedures that should be followed to ensure effective sensory evaluation 4 EX

### QUESTION 42

The star profile below shows the results of testing for a savoury sauce. Evaluate the suitability of this sauce for an elderly person 5 EV



### **QUESTION 43**

Evaluate how each of the following ingredients used in bread making affect the finished product.

- Strong wholemeal flour
- Sugar
- Salt
- Yeast 4 EV

### **QUESTION 44**

Evaluate the impact of statutory food labelling for consumers when choosing food. 4 EV

### **QUESTION 45**

Evaluate the use of genetically modified (GM) food 4 EV

### **QUESTION 46**

Explain how each of the following factors influences a consumers choice of food.

- Available income
- Peer pressure
- Environmental issues
- Geographical location 4 EX

### **QUESTION 47**

Evaluate the use of HACCP in food manufacture 4 EV

### **QUESTION 48**

Evaluate the impact of recent social trends on consumer choice of food.

- 3 EV

### **QUESTION 49**

Evaluate each of the following technological developments

- Functional foods
- Cook-chill products - 4 EV

### **QUESTION 50**

Explain the use of each of the following by a food manufacturer.

- Fat replacers
- Preservatives -4 EX

### **QUESTION 51**

Evaluate how food labelling can help the consumer make informed choices - 3 EV

### **QUESTION 52**

Evaluate the function of the Environmental Health Department in the protection of the consumer - 4 EV

### **QUESTION 53**

Explain how each of the following technological innovations improves the keeping qualities of food.

- Freeze drying
- Irradation - 4 EX

### **QUESTION 54**

Evaluate the use of artificial sweeteners in by a food manufacturer. 3EV

### **QUESTION 55**

Explain the use of each of the following in food preservation.

- Salt
- pH
- Freeze drying 3 EX

### **QUESTION 56**

Evaluate the role of each of the following

- Colourings
- Emulsifiers 4 EV

### **QUESTION 58**

Evaluate the protection offered to the consumer by the Food Safety Act 1990 - 3 EV

### **QUESTION 59**

Explain the effect of the following processing technique on a baked product

- Whisking
- Creaming -- 4 EX

### **QUESTION 60**

Explain four stages of risk assessment in the production of a chilled cream cake. - 6 EX

### **QUESTION 61**

Evaluate the impact of each of the following technological developments on the consumer

- Chilling
- Modified atmosphere packaging 4EV

### **QUESTION 62**

Evaluate the use of myco proteins in the diet - 3EV

### **QUESTION 63**

Explain the role of the Food Standards Agency in improving food safety. - 3 EX

### **QUESTION 64**

Explain three reasons for an increase in food poisoning cases linked to *Escherichia Coli* (E Coli) - 3 EX

### **QUESTION 65**

Food manufacturers provide a range of information on packaging. Evaluate the usefulness to the consumer of each of the following

- Recycle label
- Vegetarian Society Approved
- Soil Association Logo
- Barcode 4EV

### **QUESTION 66**

Explain three responsibilities of the food Standards Agency. - 3 EX

### **QUESTION 67**

Explain four different control measures which may help prevent cross contamination by a food manufacturer- 4 EX

## QUESTION 68

### Each question worth one mark

- a. Name two foods which would be considered ' high risk'
- b. Name two food products which are produced by extrusion cooking.
- c. State two causes of food poisoning.
- d. Explain one role of the EHD.
- e. Give one advantage and one disadvantage to the consumer of using irradiated food.
- f. Give one advantage and one disadvantage of using a sugar substitute.
- g. Give one advantage and one disadvantage of growing genetically modified (GM) crops.
- h. Explain the difference between a ranking test and a rating test.
- i. State two statutory pieces of information required on a food label.
- j. State two conditions required for bacterial growth.
- k. State one function of an anti-oxidant in food production
- l. Explain the following terms
  - Crystallisation
  - Gelatinisation
- m. Name two methods of sensory testing.
- n. What does the abbreviation CAP stand for?
- o. Give one advantage and one disadvantage of using artificial colours in food production.
- p. Give two ways in which the Food Safety Act protects the consumer.
- q. List two ways in which food can become physically contaminated.
- r. State the minimum temperature required for the safe re-heating of food.
- s. Explain the terms qualitative and quantitative
- t. Give one advantage and one disadvantage to the consumer of fruit juice that has undergone Ultra Heat Treatment (UHT).

## QUESTION 69

Each question worth one mark

- a. Identify two symptoms of food poisoning.
- b. Name the manufacturing process that changes oil into solid fat.
- c. Name the organisation responsible for enforcing the Weights and Measures Act 1963.
- d. State one responsibility of the Food Standards Agency.
- e. State two areas covered by the Food Safety Act.
- f. Give one advantage and one disadvantage of functional foods.
- g. Explain each of the following terms
  - Aerobic bacteria
  - Anaerobic bacteria
- h. Name two sensory words that may be used to describe texture.
- i. List two factors which influence the consumer choice of food.
- j. What does the abbreviation *GM* stand for?
- k. Give one advantage and one disadvantage of extruded food.
- l. State two advantages of using market research in the food industry.
- m. Name the process when yeast, under the right conditions, produces carbon dioxide and alcohol.
- n. What does the abbreviation *MAP* stand for?
- o. Identify one sensory test.
- p. Give one advantage and one disadvantage of on-line shopping.
- q. State two responsibilities of an environmental health officer.
- r. Give one reason for the popularity of organic foods.
- s. Identify one effect European Directives have had on the weight marking of food.
- t. Give two examples of food poisoning organisms.

**Question 70** Each question worth 1 mark

- a. Name 2 foods that could be considered to be high risk.
- b. State 2 causes of food poisoning other than bacteria.
- c. Explain the effect of dry heat on sugar
- d. Describe one effect of adding much liquid to a baked food product
- e. Give one advantage and one disadvantage of using a sugar substitute.
- f. Explain the difference between a ranking and rating test.
- g. State 2 pieces of statutory pieces of information on a food label
- h. Explain the following term - crystallisation.
- i. Explain the following term - gelatinisation
- j. Name 2 methods of sensory testing
- k. Give 2 sources of vitamin D
- l. Describe 2 ways of reducing sugar in a baked product
- m. Identify 2 groups of people most at risk from iron-deficiency anaemia.
- n. State 2 nutrients which may be easily lost when cooking vegetables.
- o. State 2 factors which may lead to diverticulitis.
- p. What is the difference between intrinsic and extrinsic sugars/
- q. Identify 2 social trends responsible for the changes in patterns of food consumption
- r. Describe 2 ways of reducing fat in a baked product.
- s. Give one advantage of altering the pH value of a food product
- t. What is meant by the term 'safe intake' in relation to Dietary Reference Value



### **A. Questions that ask candidates to Describe . . .**

Candidates should provide a statement of characteristics or features related to the question. It is more than an outline or a list. They need not be in any particular order. Candidates may provide a number of straightforward points or a smaller number of developed points, or a combination of these.

### **B. Questions that ask candidates to Explain . . . ‘BATS’**

Candidates should make a number of points that relate to the cause and effect and/or make the relationship between things clear in the context of the question.

### **C. Questions that ask candidates to Evaluate . . . ‘OFC’**

Candidates should make a number of comments which make a judgement and determine the value of something based on the criteria provided in the question.

### **D. Questions that ask candidates to Analyse . . . NUTRITIONAL ANALYSIS QUESTION**

Candidates should make a number of comments related to the context of the question. Candidates should identify appropriate information from the given sources, the relationship between the identified information, and their significance when taken together.

