



GCSE MARKING SCHEME

HOME ECONOMICS - FOOD AND NUTRITION

SUMMER 2012

INTRODUCTION

The marking schemes which follow were those used by WJEC for the Summer 2012 examination in GCSE HOME ECONOMICS - FOOD AND NUTRITION. They were finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conferences were held shortly after the papers were taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conferences was to ensure that the marking schemes were interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conferences, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about these marking schemes.

GCSE HOME ECONOMICS – FOOD AND NUTRITION

1. Award 1 mark for each correct response. [3]

- (i) false
- (ii) false
- (iii) true

2. (a) Award 1 mark for each for any two correct responses from the following: [2]

- Pasta
- Potato
- Bread

(b) Award 1 mark each for any suitable suggestions from the following and 1 mark each for stating correct choice of rice: [4]

- Carolina/short grain/Java/round grain pudding rice – Rice pudding
- Long grain/Patna/Basmati/Thai fragrant/Jasmine/white/brown rice/wholegrain – Curry/Biryani
- Arborio/Carnaroli Risotto – Risotto
- Long grain/wild rice (any other) – Pilaf
- Long grain (all rice) – Kedgeree
- Sushi rice/short grain – Sushi
- Rice in a bag/quick cook/easy cook/par-boiled – any suitable dish
- Paella rice/pudding rice/short grain – Paella

Accept any viable dish to match the rice given, the dish may be correct even if the rice is incorrect. Only credit the same dish once.

3. (a) Award 1 mark each for two correct responses from the following: [2]

- Protein
- Calcium
- Fat
- Vitamin A
- Vitamin D

(b) Award 1 mark each for different suitable points, e.g. [2]

- Pizza
- good flavour/taste good
 - a cheese that is easy to grate
 - named cheese e.g. Mozzarella, cheddar, double Gloucester
 - fat content - not too oily
 - melts well/viable melting point
 - not stringy when melted
 - colour

Only give 1 mark maximum for a named cheese e.g. Mozzarella.

- Cheesecake
- creamy/light/soft texture/spreadable [2]
 - mixes easily with other ingredients/does not curdle
 - named cheese e.g. cream cheese/Mascarpone/ricotta/
 - Philadelphia/cottage cheese/fromage frais (maximum one mark)
 - tasteless/bland or subtle
 - sweet – only if qualified e.g. Mascarpone.

Reference to cost or nutritional value for either may be credited.

4. (a) **Award 1 mark each** for any **three** of the following responses. [3]

- Correct proportions/reference to accurate weighing out. Use half fat to flour/correct type of flour and fat.
- Sieving flour
- Rubbing in – breadcrumbs/use fingertips/cold hands/no over rubbing/no lumps/gentle to prevent development of gluten
- Addition of correct amount of water/add bit at a time – use knife not hands
- Light kneading – one direction only/no turning over/roll on cold surface
- Rolling out technique/correct shape and thickness/gentle
- Flour work surface and rolling pin – not too much
- Keep everything cool
- Relax/rest in the fridge

N.B. Do **not** accept reference to cooking as the question says making.

(b) **Award 1 mark each** for any **four** correct responses. [4]

- One stage method/using oil instead of hard fat
- Pastry mixes
- Frozen pastries
- Fresh pastries
- Ready rolled varieties
- Pre made cases
- Use a food processor/mixer
- Make in bulk
- Use clingfilm/greaseproof when rolling out keeps work surface cleaner
- Only make a lid for pies, don't need to line a dish
- Use an electric pie making machine/pastry make machine
- Weigh out/rub in "beforehand"

5. (a) **Award 1 mark for each** correct response. [3]

- Conduction
- Convection
- Radiation
- Microwaves

(b) Credit response which makes reference to the following: [4]

Direct heat from the grill

- Grill heats up and gets hot
- Heat radiates from the grill on to food
- Outside seals to keep in juices
- Heat penetrates the chop
- Turning the chop
- Even thickness
- Browning
- Quick method of cooking – uses radiation and some conduction
- Thermal radiation
- Credit contact grilling references

Award 0–1 marks for a basic answer.

Award 2–3 marks for a good answer making reference to radiation and the presence of direct heat or glow.

Award 4 marks for a detailed response including the above points.

(c) Credit a response that makes reference to the following:

[4]

- Adds flavour/taste/seasoning
- Adds colour/looks more appetising
- Adds texture
- Keeps food moist
- Prevents burning/slows down cooking
- Can tenderise/meat becomes softer
- Adds nutritive value
- Adds aroma
- Can prepare beforehand
- Adds a glaze – shiny

Credit reference to named ingredients/acids – lemon juice, vinegar, wine vinegar, pineapple juice.

Award 0–1 marks for a basic response with very little reference to the above.

Award 2–3 marks for a good response which makes reference to the above points.

Award 4 marks for an excellent response which makes reference to the majority of the above.

6. (a) **Award 1 mark** for any **two** correct responses from the following: [2]

- Growth of cells
- Repair of cells
- Secondary source of energy/calories
- Regulation of enzymes

(b) Credit a response which makes reference to: [6]

- HBV – animal source, contains essential amino acids, e.g. meat, fish, milk, cheese, eggs
- LBV – vegetable/plant source, do not contain all essential amino acids, e.g. cereals, pulses, nuts
- Specific examples of how protein foods complement each other, e.g. beans on toast, lentil soup with bread roll, vegetable curry with rice
- Specific reference to soya (containing HBV) and gelatine (containing LBV)
- Reference to one amino acid making up for the loss of or compensating for another in two specific protein foods
- Reference to cost

Marks may be awarded for reference to general function of proteins in the diet - maximum 2 marks.

Award 0–2 marks for a basic response which makes little reference to complementary action of proteins

Award 3–4 marks for a good response with examples. Writing is structured, fit for purpose, reasoned and clearly expressed. Specialist vocabulary is correct.

Award 5–6 marks for an excellent response with specific examples. Writing is well-structured, fit for purpose, clearly expressed. Specialist vocabulary is used appropriately.

7. (a) **Award 1 mark** for any **one** of the following: [1]

B, C

(b) **Award 1 mark** for any **one** of the following: [1]

A, D, E, K

(c) Credit an answer which makes reference to the following points: [4]

- Not preparing too early
- Even sized florets
- Use of boiling water when starting off
- Reference to the quantity of water
- Cook until crunchy/do not overcook
- Using the cooking liquid for sauce/gravy
- Steaming as an alternative method of cooking
- Benefits of steaming
- Benefits of microwaving
- Reference to method used for microwaving
- Don't soak the vegetables overnight
- Use a saucepan with a lid
- Stir fry not boil
- Use sharp knife or break into florets with fingers

Award 0–1 marks for a basic response.

Award 2–3 marks for a more detailed response.

Award 4 marks for a good response covering the main points above.

8. (a) **Award 1 mark** for any **two** correct responses from the following: [2]

- Yeast
- Mould
- Fungi/fungus

(b) **Award 1 mark each** for any **three** of the following: [3]

- Time
- Temperature
- Moisture
- Food itself
- Oxygen/air/air flow
- Neutral pH

(c) Credit an answer which makes reference to the following: [8]

- Specific ingredients used in the meal:
chicken
rice
eggs
cream
- Cross contamination
- Correct storage temperatures
- Food hygiene and cleaning procedures – equipment
- Correct reheating temperatures
- Correct cooking temperatures
- Storage after cooking

Award 0–2 marks for basic response which may resemble a list or no specific reference to high risk foods. Communication is hampered by lack of meaning and poor expression. Little or no use of specialist vocabulary.

Award 3–5 marks for a good response with examples of high risk foods. Writing is structured, fit for purpose, reasoned and clearly expressed. Specialist vocabulary is correct.

Award 6–8 marks for an excellent response with specific examples of high risk foods and sound reasoning. Writing is well-structured, fit for purpose and clearly expressed. Specialist vocabulary is used appropriately.

9. (a) Credit a response that makes reference to the following:

[8]

Balanced diet

- Eatwell plate
- Importance of five a day
- Dietary fibre
- Importance of protein foods
- Vitamins
- Minerals, e.g. calcium for bone and teeth formation
- Energy giving foods – starchy options
- Base meals on carbohydrates
- Eat breakfast
- Low sugar diet
- Diet low in saturated fats
- Salt content of foods
- Amounts and types of fat
- Traffic light system on packaging
- Two portions oily fish a week
- Exercise/keeping active
- Drinking water
- Taking up sport
- Walking
- Sufficient sleep

Award 0–2 marks for a basic response. Writing conveys some reasoning although errors and poor expression hamper communication. Little or no use of specialist vocabulary.

Award 3–5 marks for a good response with some reference to suitable foods with reasons for the advice given. Writing is structured to communicate meaning clearly and contains relatively few errors. The use of specialist vocabulary is correct.

Award 6–8 marks for a very good response with majority of points addressed. Writing is well-structured, fit for purpose, clearly expressed and error free. Specialist vocabulary is used appropriately.
No more than 4 marks if only nutrition based.

10. Credit a response that makes reference to the following:

[12]

- (a) (i) Range available – advantage of each
- Shape
 - Weight
 - Reusable
 - Cost
 - Colour/appearance
 - Some can be moulded around the product
 - Printing information on packaging
 - Content visible
 - Reference to re-cycling, bio-degradability
- (ii) Product name and description
- Storage
 - Weight
 - Instructions for use
 - Name and address of supplier
 - Date of coding
 - Nutrition labelling
 - Allergy warning
 - Other information – fair trade, organic etc.
 - Usefulness of information on food packaging

- (b) Ethical, organic, functional, GM – a sound description of each
- (i)
- Ethical foods – environmental, welfare, trading, quality
 - Organic – no artificial/chemical substances added, natural
 - Functional – changed/modified so that there are benefits, e.g. nutritional, instant thickening
 - GM – changed with view to making an improvement, e.g. quicker growth, resistant to disease
 - Specific examples of the above
 - Labelling and logos to identify
- (ii)
- Choice for the consumer
 - GM foods not always clearly labelled
 - Able to grow plants which are resistant to disease, reducing need for pesticides
 - Higher yields for crops – helps feed growing population
 - Health benefits – edible vaccines
 - Crops able to survive extreme conditions
 - Plants could be modified to make more nutritious
 - Provision of cheaper, better quality foods
 - Consumers have religious, moral values influencing choice
 - Additional benefits, e.g. additional nutrients
 - Genes from GM crops can transfer to non-GM crops
 - Do we know enough about GM?
 - Bio-diversity issue (balance of nature, wildlife, environment)
 - Possible exploitation of animals – ways of making animals grow more quickly, etc.
 - Monitoring – is it strict enough?
 - Vegetarian objections – tampering with nature
 - Religious reasons for objecting
 - Animal welfare issues
 - Fair trading issues

Award 0–3 marks for a basic response which mentions a few of the above points. Limited knowledge evident. Little or no attempt at assessing. Writing conveys some meaning although errors and poor expression hamper communication. Very little reference to the examples given. Little or no use of specialist vocabulary.

Award 4–7 marks Answer shows some understanding and discussion. Evidence of a good range of knowledge and understanding. Some reference to all examples given. Writing is structured to communicate meaning and contains relatively few errors. The use of specialist vocabulary is correct.

Award 8–10 marks for a response which shows good understanding. Good application of in-depth knowledge evident throughout with some discursive comments and clear assessing. Specific reference to all the examples given in the question. Writing is well-structured, fit for purpose, clearly expressed and largely error free. Specialist vocabulary is used appropriately.

Award 11–12 marks for a very detailed response which covers points mentioned and allows the candidates to discuss, evaluate and assess.



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