

CONFIDENTIAL
November 2002

INTERNATIONAL GCSE

MARKING SCHEME

MAXIMUM MARK : 100

SYLLABUS/COMPONENT : 0635/04

FOOD SCIENCE
Practical

IMPORTANT NOTICE

Marking schemes have been issued on the basis of ONE copy per Assistant Examiner and TWO copies per Team Leader.



Detailed mark scheme**(a) Preparation session**

Details of the mark allocation are printed on the mark scheme.

(b) Evaluation - 10 marks

This section, marked externally, has a prepared mark scheme relating to questions on the practical paper only.

1. Importance of vegetables in meal preparation

protein - LBV - e.g. pulses - for growth and repair
 starch - e.g. potatoes - energy
 sugar - e.g. beetroot - energy
 Vitamin C - e.g. cabbage - absorption of iron
 Vitamin A - e.g. carrots - keeps mucous membranes moist
 iron - e.g. spinach - haemoglobin
 calcium - e.g. cabbage - bones and teeth
 colour - texture - flavour
 water - refreshing
 NSP - encourages peristalsis etc.

8 points

2 points for 1 mark

[4]

Methods of preserving vegetables

drying - e.g. onions, mushrooms, peas
 pickling - e.g. onions, cabbage
 freezing - e.g. peas
 canning - e.g. beans etc.

any 3 methods + example

1 mark for method + example

[3]

Evaluation

Points may include:

Success of chosen dishes, suggested improvements, problems encountered, whether dishes chosen were enough or too much for the time available, problems with availability of ingredients and how they were dealt with, difficulties etc.

Comments on flavour, colour, texture and appearance. How improvements could be made, if appropriate.

Changes which would be made if the test were to be repeated

Many other points could be made.

Any 3 well-explained points at 1 mark

[3]

2. Functions of NSP

absorbs water - adds bulk - makes stools soft - easy to eliminate - filling
any 4 points

1 mark for each 2 points

[2]

Problems of a diet low in NSP

constipation - cancer of colon - diverticular disease - haemorrhoids - varicose veins -
any 4 points

1 mark for each 2 points

[2]

Ways of increasing NSP in the diet

fruit with skins - whole grain cereals - bran - dried fruit - fresh fruit and vegetables -
unpolished rice - oats - wholemeal bread etc.

any 6 examples without repetition

1 mark for each 2 examples

[3]

Evaluation as in Question 1

[3]

3. Ingredients for thickening and setting

EGG heat - on protein - coagulates - 60°C

STARCH moist heat - grains swell - absorb liquid - grains burst - release starch -

GELATINE absorbs liquid - traps liquid in network - protein chains unravel -

EGG YOLK emulsification - lecithin - prevents separation of oil and water -

any 10 points for ingredients and explanation

1 mark for each 2 points

[5]

Special points

egg - do not overheat - use bain marie - mixture will separate - syneresis

starch - stir to prevent lumps

gelatine - do not boil - will not set - protein will coagulate

egg yolk - do not add too much oil at once

any 4 points (not for naming ingredient)

1 mark for each 2 points

[2]

Evaluation as in Question 1

[3]