CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International Advanced Level

MARK SCHEME for the October/November 2014 series

9336 FOOD STUDIES

9336/02 Paper 2 (Practical), maximum raw mark 100

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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CAMBRIDGE
International Examinations

1

Section A

(a) (i) Four dishes, each showing a different way of saving time [4]

(ii) Suitability of dishes selected to show how time is saved [2]

(iii) Variety of skills shown without repetition [2]

(b) (i) Choice of yeast dish [1]

(ii) Degree of skill avoiding repetition with **part (a)** [1]

(c) (i) Method of saving time and brief explanation (× 4);
blender – to make breadcrumbs, purée fruit / soup – electric food mixer – preparation of cake / yeast mixtures – food processor – preparation of yeast dough / shortcrust pastry / meringues – microwave oven – melting chocolate / cooking vegetables – pressure cooker – boiling vegetables / stewing meat / steamed puddings / crème caramel – use of convenience foods – tomato purée / stock cubes – tender cuts of meat – can grill quickly – [4]

(ii) Foods in season – locally grown – garden produce – special offers – buy in bulk if storage is available – compare prices – consider home brands – markets can be cheaper than shops though quality can be a concern – avoid convenience foods – cheaper cuts of meat – use eggs and milk for HBV protein – complementary proteins – e.g. baked beans on toast or milk with cereals – more than one dish in oven – use all of oven or all of hob for meal – use residual heat – base of pan to fit burner – lids on pans – use of tiered steamer – pressure cooker – microwave oven – do not cook more than is needed as it may be wasted – batch bake cakes / pastries – do not overcook food – choose quick methods of cooking e.g. frying and grilling – thin slices of meat or minced meat cooks quicker – [6]

(iii) Include skills used – use of seasonal foods – ease of obtaining foods – oven management – time management – cost – [4]

(iv) Nutritional value of dish chosen in **(b)** [4]

Time Plan [8]

[Section A total: 36]

Section B: Manipulative skill and method or working **[Section B total: 30]**

Section C: Results and Serving **[Section C total: 34]**

[Total: 100]

2

Section A

(a) (i) Four dishes, each showing types of milk or milk products [4]

(ii) Suitability of dishes selected to show use of milk or milk products [2]

(iii) Variety of skills shown without repetition [2]

(b) (i) Choice of yeast dish [1]

(ii) Degree of skill avoiding repetition with **part (a)** [1]

(c) (i) Whole milk – skimmed – semi-skimmed – gold top – pasteurised – sterilised – UHT – dried – condensed – evaporated – untreated – homogenised; cheese – yoghurt – single cream – double cream – butter [2]

Buy according to need – too much may turn sour before use – use in rotation – ensure older milk is used first – do not mix old and new – sours more quickly – store in cool conditions (temperature must be specified) – clean – prevent souring bacteria spreading to newer milk – covered – prevent dust etc. – away from strong odours – milk absorbs smells – out of sunlight – destroys riboflavin [3]

(ii) Pasteurisation – destroys pathogens – either heated to 72 °C for 15 seconds then rapidly cooled to 10 °C **or** heated to 63 °C for 30 min then cooled – Holder method;
homogenisation – milk is pasteurised then forced through a fine mesh to break up the fat globules – fat is evenly distributed throughout the milk;
sterilised milk – all bacteria killed – milk is homogenised – bottled and sealed – heated to 113 °C for 15–40 min – high temp for longer caramelises lactose and changes flavour;
UHT – sterile milk – heated to 132 °C for one second – rapidly cooled and packed in sealed containers – colour, flavour not affected;
dried – water removed – spray or roller – homogenised before drying – packed into airtight tins;
condensed – 40% sugar is added – 60% by volume water is evaporated – homogenised – sealed in cans;
evaporated – 60% by volume water is evaporated – sealed in cans – sterilised for 20 min 115 °C; [5]

(iii) Include skills used – use of seasonal foods – ease of obtaining foods – oven management – time management – cost – [4]

(iv) Nutritional value of dish chosen in **(b)** [4]

Time Plan [8]

[Section A total: 36]

Section B: Manipulative skill and method or working **[Section B total: 30]**

Section C: Results and Serving **[Section C total: 34]**

[Total: 100]

3

Section A

(a) (i) Four dishes, each showing thickening and setting of dishes [4]

(ii) Suitability of dishes selected to show thickening and setting [2]

(iii) Variety of skills shown without repetition [2]

(b) (i) Choice of yeast dish [1]

(ii) Degree of skill avoiding repetition with **part (a)** [1]

(c) (i) Gelatinisation – starch goes into cold water to separate grains – heat to soften – absorb liquid and swell – forms a gel, e.g. custard, on cooling – starch molecules form a network – encloses water in mesh;
coagulation – protein when heated, e.g. egg at 60 °C – begins to denature – cross-linkages between molecules break – shape changes irreversibly – sets, e.g. egg custard, cake mixtures;
acid causes milk to solidify – casein coagulates – curd forms – rennet from rennin – coagulates milk protein – make junket;
gelatine – dispersed in cold water – heated to form a sol – do not boil – protein denatures – will not set – liquid is easily poured when cool – coiled molecules unwind – forms mesh which traps liquid – solidifies, e.g. jelly, cold soufflé;
use of pectin – complex carbohydrate – found in plants, e.g. apples, plums – used in jam making (with sugar) – acid needed;
emulsification – lecithin in egg yolk is emulsifier – when mixed with oil and water – one part is hydrophilic – other is hydrophobic – attracted to both ingredients – makes droplets of oil disperse in liquid – when would normally separate – e.g. mayonnaise, creamed cake mixture;
gluten – protein found in flour – developed by absorption of liquid – and by manipulation / kneading – forms an elastic substance – holds carbon dioxide – produced during fermentation – keeps risen shape – sets when heated – coagulation of protein; [6]

(ii) Dry methods of cooking – roasting, baking, frying, grilling; moist methods of cooking – boiling, steaming, stewing; adding fruit – raw / cooked / dried – vegetables – nuts / seeds / wholegrain cereals / wholemeal flour; purée soups; freezing e.g. ice cream [4]

(iii) Include skills used – use of seasonal foods – ease of obtaining foods – oven management – time management – cost – [4]

(iv) Nutritional value of dish chosen in **(b)** [4]

Time Plan [8]

[Section A total: 36]

Section B: Manipulative skill and method or working **[Section B total: 30]**

Section C: Results and Serving **[Section C total: 34]**

[Total: 100]