

Mark Scheme (Results) Summer 2008

GCSE

GCSE Design & Technology: Food Technology (3970) Paper 2F

3970 2F Mark Scheme

Question Number	Answer	Mark
Q1(a)	<p>Name and task that can be carried out by using the following:</p> <p>Name: Rolling pin/ roller pin</p> <p>Task: Rolling (doughs/icing) or crushing (biscuits) or flattening</p> <p>Name: Cooling rack/ cool rack/ cool wire (Do not accept grill pan)</p> <p>Task: Cooling, patting, placing, decorating, icing (cakes, pastries, biscuits)</p> <p>Name: Flour dredger/shaker/sugar caster/sprinkler (Do <i>not</i> accept duster)</p> <p>Task: Sprinkling/shaking/dredging/dusting (flour/cornflour/icing sugar/caster sugar)</p> <p style="text-align: right;">(6 x 1)</p>	(6)
Q1(b)(i)	<p>Three ways given:</p> <ul style="list-style-type: none"> • Lightweight (1) • Easy to use / hold / manipulate/work (1) • Easy to clean (1) • Easy of access the controls/easy to find/use knobs (1) • Small to store/doesn't take up much space/store in a small space (1) • Cheap / low cost / low running costs (1) • Work in saucepan / directly in containers/saves washing up (1) • Does not require strength / pressure to operate/easy to use with arthritis (1) <p style="text-align: right;">(3 x 1)</p> <p style="text-align: center;">(Do <i>not</i> accept safety)</p>	(3)
Q1(b)(ii)	<p>One advantage explained:</p> <ul style="list-style-type: none"> • No preparation of ingredients/quick to prepare/make because all you have to do is add hot water. Also saves time/ quicker than making your own/ from scratch • Cheaper because you do not have to buy separate/different ingredients/saves energy • Stores well so that you do not have to go shopping often/dried for long shelf life • Versatile/not boring because there are lots of different varieties • Easy to take to work because it's light to carry/small to put in bags • No waste because it's a single portion <p style="text-align: right;">(2 x 1)</p>	(2)
Total for question		11

Question Number	Answer	Mark
Q2(a)	<p>Two nutrients given:</p> <ul style="list-style-type: none"> • protein/proteen/protene/protein (1) • fat (1) • carbohydrate/CHO/Lactose (1) • vitamin A (1) <p style="text-align: right;">(2 x 1)</p> <p style="text-align: center;">(Any alternative spellings acceptable)</p>	(2)
Q2(b)	<p>One reason given:</p> <ul style="list-style-type: none"> • strong/strengthen / harden bones (1) • strong/strengthen / harden teeth (1) <p style="text-align: right;">(1 x 1)</p> <p style="text-align: center;">(No reference to growth allowed)</p>	(1)
Q2(c)	<p>One way described:</p> <ul style="list-style-type: none"> • there is less saturated fat so that it lowers the risk of CHD / heart attack / reduces clogging of arteries • it lowers the fat / energy so that there is less risk of obesity / being overweight/less fattening <p style="text-align: right;">(2 x 1)</p>	(2)
Q2(d)	<p>One reason explained:</p> <ul style="list-style-type: none"> • the milk will go sour because of the action of enzymes • when it is stored for a long time food poisoning can occur because bacteria will breed • needs low temperatures/increases in temperature allow the milk to sour quickly / bacteria to breed / grow / multiply • milk provides ideal source of food for bacteria to breed / grow / multiply/a high risk food <p style="text-align: right;">(2 x 1)</p>	(2)
Q2(e)	<p>Two different ways given:</p> <ul style="list-style-type: none"> • pasteurisation (1) • evaporated (1) • condensed (1) • sterilisation (1) • homogenisation (1) • UHT treatment/UHT (1) • Canning (1) • drying/drying/dried (1) • freezing/frozen (1) • irradiation (1) <p style="text-align: right;">(2 x 1)</p> <p style="text-align: center;">(Any alternative spellings acceptable)</p>	(2)

Q2(f)	<p>One reason explained:</p> <ul style="list-style-type: none"> • it is cheaper / reduces the cost of the milkshake because strawberries are expensive • it is easier to store because strawberries have a short shelf life / go off quickly / go mouldy • improves/ strengthens taste or flavour / makes it less bland fresh strawberries are weaker in flavour / not concentrated • it helps to provide a even/consistent flavour because strawberries will vary <p style="text-align: right;">(2 x 1)</p>	(2)
	Total for question	11

Question Number	Answer	Mark
Q3(a)	It is essential that the point and reason both fully relate to form, function or user requirements.	
Q3(a)(i)	<p>MARKET Point: provide a single portion/small portion/eaten from a small container Reason: for students/elderly/those on their own/lunch boxes/different meal times/food on the move/saves time</p> <p>Point: provide use low fat ingredients Reason: appeal to health conscious market</p> <p>Point: appeal to a wide audience/age group Reason: greater demand: profit/sell more</p> <p>Point: to provide a ready made dessert Reason: for convenience/save time/for those who lack skill</p> <p>Point: to provide a traditional dessert Reason: authentic taste</p> <p style="text-align: right;">(2 x 1)</p>	(2)
Q3(a)(ii)	<p>ENVIRONMENT Point: strawberries free from pesticides / organic Reason: to prevent contamination/protect wildlife</p> <p>Point: No GM ingredients Reason: to prevent mutation of crops / cross breeding</p> <p>Point: container able to be recycled/biodegradable Reason: prevent litter / preserve resources / reduce pollution/stop overuse of landfill sites/reduce waste</p> <p style="text-align: right;">(2 x 1)</p>	(2)
Q3(a)(iii)	<p>QUALITY Point: even / straight layers Reason: to improve look of product</p> <p>Point: even piping Reason: to make it attractive/cover the top</p> <p>Point: even spread of chocolate curls Reason: to make it consistent / improve appearance</p> <p style="text-align: right;">(2 x 1)</p>	(2)

Q3(b)(i)	<p>Two reasons given:</p> <ul style="list-style-type: none"> • Luxury ingredient (1) • Traditional topping (1) • Lower fat than double cream (1) • Cheaper than double cream (1) • Holds its shape (1) <p style="text-align: right;">(2 x 1)</p>	(2)
Q3(b)(ii)	<p>Two reasons given:</p> <ul style="list-style-type: none"> • Chocolate is popular (1) • Contrast in tastes/flavour (1) • Little effect on nutritional value/fat (1) • Contrast in colour/different colour (1) • Luxury ingredient (1) • Easy to shape/make/grate (1) • Will stick to cream easily (1) • Curls are lightweight so will not sink into the cream (1) • Chocolate will not dissolve/leach into cream (1) <p>(Do <i>not</i> accept any reference to attractive, appealing/look better)</p> <p style="text-align: right;">(2 x 1)</p>	(2)
Q3(c)	<p>Two properties and reasons given:</p> <p>Property: fatless Reason: reduce the total fat content / lower risk of CHD / heart attack (Do <i>not</i> accept healthy)</p> <p>Property: light/open texture/soft texture Reason: good mouth feel / contrast to other layers /different texture</p> <p>Property: to soak up/absorb the fruit jelly/fruit juice Reason: aerated / full of holes</p> <p>Property: aerated / full of holes Reason: to soak up/absorb the fruit jelly/fruit juice</p> <p>Property: traditional ingredient Reason: to give authentic taste / texture</p> <p>Property: firm / solid / sturdy Reason: keep layers separated</p> <p style="text-align: right;">(4 x 1)</p>	(4)

Q03(d)	<p>Two Quality Control Checks given:</p> <ul style="list-style-type: none"> ▪ bacterial / lab / laboratory check (1) ▪ weight (1) ▪ x-ray/ scanning (1) ▪ metal detector (1) ▪ check/probe temperature (1) ▪ visual check to see lid secure/sealed /tamper proof (1) <p style="text-align: right;">(2 x 1)</p> <p style="text-align: center;">(Do <i>not</i> accept HACCP on its own)</p>	(2)
Q03(e)	<p>One way described:</p> <ul style="list-style-type: none"> ▪ the cream / jelly / milk / fruit have a short shelf life / high risk of food poisoning ▪ strong competition as wide choice available / huge variety of desserts on the market ▪ layers may separate during storage which spoils the appearance ▪ where problems arise it is easy to trace faulty products ▪ trifle must be chilled and cold storage is limited <p style="text-align: right;">(2 x 1)</p>	(2)
Q3(f)(i)	<p>One explanation given:</p> <p>(i)Encourage people to eat more portions of fruit each day</p> <ul style="list-style-type: none"> • One fruit portion because of the strawberries • One fruit portion because of the fruit juice <p style="text-align: right;">(2 x 1)</p>	(2)
Q3(f)(ii)	<p>Be eye-catching to attract customers</p> <ul style="list-style-type: none"> • a variety of colours because of the layers e.g. reference to custard, jelly, chocolate and cream (minimum 2) • a decorative finish because of the pipings/chocolate curls • provide contrasts in colours between layers/cream and chocolate • use of individual/decorative container because it appeals to singles/elderly/for parents • use of clear containers which allows the consumer to see the contents <p style="text-align: right;">(2 x 1)</p>	(2)
	Total for question	22
	Total for paper	44