

SECTION B
220 MARKS

1. The following is the nutritional content of wholemeal bread and of white bread.

 Wholemeal bread	 White bread																												
<p>Typical values per 100 g</p> <table style="width: 100%; border: none;"> <tr><td>Energy</td><td style="text-align: right;">246 kcal</td></tr> <tr><td>Protein</td><td style="text-align: right;">13.0 g</td></tr> <tr><td>Carbohydrates</td><td style="text-align: right;">41.0 g</td></tr> <tr><td style="padding-left: 20px;">of which sugars</td><td style="text-align: right;">6.0 g</td></tr> <tr><td>Fibre</td><td style="text-align: right;">7.0 g</td></tr> <tr><td>Fat</td><td style="text-align: right;">3.4 g</td></tr> <tr><td>Sodium</td><td style="text-align: right;">400 mg</td></tr> </table> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p><i>Allergen advice</i> <i>contains gluten</i></p> </div>	Energy	246 kcal	Protein	13.0 g	Carbohydrates	41.0 g	of which sugars	6.0 g	Fibre	7.0 g	Fat	3.4 g	Sodium	400 mg	<p>Typical values per 100 g</p> <table style="width: 100%; border: none;"> <tr><td>Energy</td><td style="text-align: right;">240 kcal</td></tr> <tr><td>Protein</td><td style="text-align: right;">9.0 g</td></tr> <tr><td>Carbohydrates</td><td style="text-align: right;">49.0 g</td></tr> <tr><td style="padding-left: 20px;">of which sugars</td><td style="text-align: right;">5.0 g</td></tr> <tr><td>Fibre</td><td style="text-align: right;">2.7 g</td></tr> <tr><td>Fat</td><td style="text-align: right;">3.2 g</td></tr> <tr><td>Sodium</td><td style="text-align: right;">491 mg</td></tr> </table> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p><i>Allergen advice</i> <i>contains gluten</i></p> </div>	Energy	240 kcal	Protein	9.0 g	Carbohydrates	49.0 g	of which sugars	5.0 g	Fibre	2.7 g	Fat	3.2 g	Sodium	491 mg
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- (a) Using the nutritional information above, compare and evaluate the nutritional value of wholemeal bread and the nutritional value of white bread.
name of nutrient = 1m quantity = 1m comment = 1m (6x3) 18
- (b) (i) Name **three** cereals included in the diet. **(3x2) 6**
wheat, oats, barley, rye, maize / corn, rice
- (ii) Suggest a different food product made from **each** cereal. **(3x3) 9**
- | Cereals | Food products |
|----------------|--|
| wheat | <i>flour, bread, pasta, couscous, breakfast cereals, semolina</i> |
| oats | <i>porridge, oatmeal, muesli, oatcakes</i> |
| barley | <i>pearl barley, beer, whiskey</i> |
| rye | <i>rye flour, bread, crispbread, whiskey</i> |
| maize / corn | <i>cornflakes, popcorn, sweetcorn, corn oil, tacos</i> |
| rice | <i>rice flour, rice grains, ground rice, rice crispies, rice paper</i> |
- (c) Outline the effects of cooking on cereals. **(3x4) 12**
The starch grains swell and burst, grains absorb liquid and thicken, Texture changes - cellulose become more digestible, colour changes, flavour changes, protein coagulates, loss of vitamin B. etc
- (d) (i) Explain why pastry needs to be put into a pre-heated hot oven when baking. **(1x5) 5**
starch grains burst on heating, absorb the fat, makes the pastry lighter more crisp texture and prevents a soggy texture, allow -pastry rise/light texture.
- (ii) What is the role of gluten in bread making? **(1x5) 5**
gives dough an elastic texture, it can stretch when cooking, allows dough to rise, helps bread to maintain its shape as it is baked. Allow -to be fluffy as reference to elasticity.

2. (a) Describe **two** different types of diabetes. 10
(name = 2x2 description = 2x3)
- Type 1 diabetes/insulin-dependent diabetes/early onset/childhood**
occurs when insulin is not produced in the body (pancreas), insulin must be taken by injection to regulate blood sugar levels.
- Type 2 diabetes/non-insulin dependent diabetes/late onset diabetes /adult**
occurs when the body cannot use the insulin it produces, can be controlled by a strict diet/medication.
- (b) (i) List **three** factors that increase the risk of developing diabetes. (3x3) 9
weight gain, obesity, family history/heredity, lack of exercise, pregnancy, poor lifestyle, high sugar diet, high fat diet, high alcohol consumption.
- (ii) Outline the dietary and lifestyle changes a person with diabetes should follow. (4x3) 12
(expect one point related to diet and one point related to lifestyle)
follow a healthy balanced diet, eat regular meals, avoid foods high in sugar, lower blood glucose level, include high fibre CHO foods, maintain a healthy weight, exercise regularly.
- (c) What are the health problems associated with diabetes? (3x3) 9
heart attack, stroke, poor blood circulation, high blood cholesterol levels, damage to kidneys, damage to eyesight/blindness, loss of limbs, high blood pressure, teeth and gum problems, nerve damage, foot problems, dizziness, excessive thirst, frequent urination. etc
- (d) Explain the terms: (i) empty kilocalories (ii) peristalsis (iii) refined foods. (3x5) 15
- (i) **empty kilocalories:** *foods that do not contain any other nutrients except sugar e.g. table sugar example only 2/5*
- (ii) **peristalsis:** *muscular movement of food through the digestive system*
- (iii) **refined foods:** *foods that have been processed and lack many nutrients as a result e.g. packet soup, white flour example only 2/5*

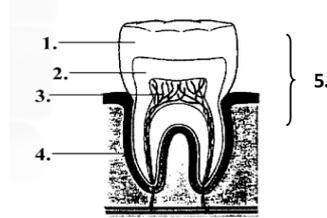
3. (a) Outline the functions of advertising goods and services. (4x4) 16
introduces new products into the market, provides information, promotes brands, increases sales, allow - creates employment.
- (b) (i) Name **four** different advertising techniques used by companies to market luxury goods. (4x4) 16
attractive displays, discount offers, free sample, easy pay system, shopper loyalty scheme, use of social media influencers, celebrity endorsement, sponsorship, product placement, sponsorship, allow types of advertising- TV/radio adverts, use of colour, humour, music.
- (ii) Choose **one** technique named and explain why you think it is effective. (1x5) 5
 Technique = 1mark effectiveness = 4m
accept any one technique named above and expect a clear explanation of why it is effective
- (c) Describe how the Consumer Protection Act 2007 (Consumer Information Act 1978) provides protection to the consumer. (2x3) 6
ensures compliance with consumer legislation, protects consumers from misleading, aggressive or prohibited practices, protects consumers from false and misleading claims about goods, services and prices, allows a 14 day cooling off period.
- (d) Suggest a different advantage to the consumer for **each** of the following: (3x4) 12
- (i) loss-leader pricing (ii) bulk buying (iii) credit buying.
- (i) **loss leader pricing:** *consumer can avail of goods at a discount price, get good value.*
- (ii) **bulk buying:** *consumer can save money by buying goods in large quantities.*
- (iii) **credit buying:** *consumer has the use of a product before it is fully paid for, for large purchases e.g. car, washing machine, buy now pay later.*

4. (a) Identify the parts of the tooth labelled 1,2,3,4 and 5

(5x3)

15

- 1 = enamel
2 = dentine
3 = pulp cavity
4 = cementum
5 = crown



- (b) Name **four** types of permanent teeth and give a function of each type named.
(types = 4x2) (functions = 4x2)

16

Types

incisors
canines
pre-molars
molars/wisdom

Functions

bite and cut food
tear food
chew and grind food
chew and grind food

- (c) Suggest the guidelines that teenagers should follow in order to maintain healthy teeth.

(4x3)

12

(expect one point related to diet and one point related to dental hygiene)

avoid foods and drinks that contain sugar, eat a healthy diet that contains calcium, eat foods rich in vitamin D, brush properly at least twice a day, use dental floss, replace toothbrush regularly, visit dentist regularly.

- (d) Describe how plaque can cause dental decay.

(2x6)

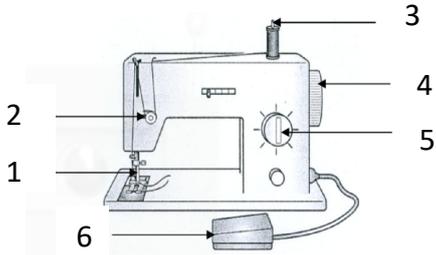
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plaque consists of saliva, food particles and bacteria which build up on the surface of teeth. If plaque is not removed, acids are produced by bacteria which attack the enamel wearing it away causing tooth decay, plaque can build up to form tartar, bacteria present act on sugar to produce acid.

5. (a) Describe how technology used in the home can benefit the family. **(4x4)** **16**
Benefit = 2m description =2m
less time and energy is spent on household tasks, preparation of food is made easier, greater access to the outside world, access to internet/online shopping/banking, home security - alarms, electronic gates, improved methods of communication, more time available to spend with family and friends, better standards of hygiene
- (b) Write a note on microwave cookers under **each** of the following headings:
 (i) choice (ii) use (iii) cleaning.
- (i) **choice:** *power level (700W-1200W), size of cooker (space and position in room), capacity (17litre-32litre), type (combi, convection, drawer), brand, cost, features, needs of the family, colour, guarantee* **(2x3)**
- (ii) **use:** *defrosting, reheating, cooking, melting, allow- a point on using the microwave also* **(2x3)**
- 18**
- (iii) **cleaning:** *follow manufacturers' instructions, avoid abrasive cleaning agents, use warm soapy water for removable parts and inside and outside of microwave, rinse and dry thoroughly.* **(2x3)**
- (c) List **three** modern features of a microwave cooker and give the function of **each** modern feature listed.
- | <i>(features = 3x1)</i> | <i>(function = 3x2)</i> | |
|---------------------------|--|----------|
| Features | Function | 9 |
| <i>pre-set programmes</i> | <i>reheating and defrosting (allow both)</i> | |
| <i>browning dish</i> | <i>browns foods that are normally grilled, fried, roasted</i> | |
| <i>removable racks</i> | <i>allows to cook several items at once</i> | |
| <i>sensor cooking</i> | <i>measures humidity of oven and moisture of food and adjusts power level and time</i> | |
| <i>oven lining</i> | <i>smooth interior that wipes clean</i> | |
| <i>timers / digital</i> | <i>indicates when the time is complete</i> | |
| <i>turntable</i> | <i>to cook food evenly</i> | |
| <i>child lock</i> | <i>safety device</i> | |
| <i>modern finish</i> | <i>black or stainless steel finish etc</i> | |
| <i>turntable</i> | <i>the turn table allows the food to turn in a circular motion.</i> | |
- (d) Name **three** methods of heat transfer and describe how **each** method is used in cooking.
- | <i>(methods = 3x2)</i> | <i>(use = 3x2)</i> | |
|------------------------|--|-----------|
| Methods | Use | 12 |
| <i>conduction</i> | <i>frying, sautéing (hob)</i> | |
| <i>convection</i> | <i>boiling, stewing, poaching, baking, roasting</i> | |
| <i>radiation</i> | <i>grilling, toasting, barbecuing allow -correct description without a name.</i> | |

6. (a) Name the parts of the sewing machine labelled 1,2,3,4, 5 and 6. (6x3) 18

- 1 = *presser foot/needle*
- 2 = *tension disc /dial*
- 3 = *spool pin/ holder*
- 4 = *hand wheel*
- 5 = *stitch selector/ buttonhole*
- 6 = *foot pedal*



(b) State the rules to follow when (i) using and (ii) caring for a sewing machine. 12
(using = 4x3) (caring = 3x3)

(i) **using:** *thread properly, adjust length and tension of stitch to suit fabric, test the stitch, press lightly on foot pedal, raise needle and lift presser foot to remove fabric.*

(ii) **caring:** *follow instructions, do not run threaded machine without fabric, cover when not in use, oil moving parts occasionally, service machine regularly.*

(c) Name **two** different seam finishes. (2x4) 8
zig-zag machining, edge machining/stitching, overlocking, machine over edging, binding, blanket stitching, using a pinking shears.

(d) Explain the following textile terms: (i) dart (ii) warp threads. (2x4) 8

(i) **dart:** *this is a fold of fabric used to give shape to a garment.*

(ii) **warp threads:** *these are strong threads running down the length of the fabric/ parallel to the selvage edge.*

