WARNING
You must return this paper with your answerbook, otherwise marks will be lost.

EXAM NUMBER


FOR EXAMINER

Total No.
of Marks


# Coimisiún na Scrúduithe Stáit State Examinations Commission 

JUNIOR CERTIFICATE EXAMINATION 2006
HOME ECONOMICS - HIGHER LEVEL
MARKING SCHEME AND SAMPLE ANSWERS
FRIDAY 16 JUNE - AFTERNOON 2.00-4.30

## Total Marks 300



| For examiners use only |  |  |
| :---: | :---: | :---: |
| QUESTION | MARK |  |
| Section A <br> (Total) |  |  |
|  |  |  |
| Section B | $\mathbf{1}$ |  |
|  | 2 |  |

## INSTRUCTIONS

1. Section A - 80 marks.

Answer 20 (twenty) questions from Section A; all questions carry equal marks.
2. Answer the questions in the space provided.
3. The completed answer sheets for Section A must be returned to the examination supervisor.
4. Section B-220 marks.

Answer 4 (four) questions from Section B; all questions carry equal marks.

## SECTION A

80 marks

Answer 20 (twenty) of the following questions. All questions carry equal marks.

1. Give one important source of each of the following:

|  | SOURCE |  |
| :--- | :--- | :--- |
| (i) | Vitamin C | (i) oranges, blackcurrants, cranberries |
| (ii) | Dietary fibre | (ii) bran, brown bread, fruit, vegetables |

2. Name two types of additives used in convenience foods.
(i) colourings, preservatives
(ii) flavourings, sweeteners
3. Suggest four ways of reducing the intake of fat in the diet.
(i) use low fat spread instead of butter
(ii) remove visible fat from meat
(iii) grill instead of frying food
(iv) cut out fatty foods e.g. cakes, doughnuts, chocolate
4. List four raising agents used in home baking.
(i) baking powder
(ii) bread soda
(iii) air
(iv) yeast
5. Give an example of a different vegetable under each of the following classifications:

| CLASSIFICATION OF VEGETABLES |  |  |  |
| :--- | :--- | :--- | :--- |
| GREENS | ROOTS | FRUIT | PULSES |
| cabbage <br> broccoli <br> lettuce | carrots <br> turnips <br> potatoes | tomatoes <br> cucumber <br> pepper | peas <br> beans <br> lentils |

6. Explain each of the following cookery terms:
(i) roux a mixture of flour and fat which when combined is used
$\qquad$
(ii) sauté to toss food lightly in hot oil
7. List four sources of consumer information.
(i) TV/radio, citizen's advice
(iii) billboards, consumers' associations
8. Give one advantage and one disadvantage of buying on credit.

Advantage get the goods sooner, good for large items e.g. car avoids carrying large amounts of cash, prevents price rise

Disadvantage high interest rates charged encourages over-spending, difficult to make payments
9. What information does this symbol convey to the consumer?

Guaranteed Irish $\qquad$
Goods of a high quality/standard
that are made in Ireland

10. Give two advantages of the Small Claims procedure.
(i) quick - claims are processed over weeks cheap - small fee charged
(ii)
no need for a solicitor
informal procedure
11. Give the function of each of the following:
(i) arteries carry blood away from the heart
carry oxygen rich blood around the body
(ii) haemoglobin carries oxygen around the body in the blood, prevents anaemia
12. Name the parts of the female reproductive system labelled $\mathbf{A}, \mathbf{B}, \mathbf{C}$ and $\mathbf{D}$.

A. Uterus/Womb
B. Fallopian tube
C. Ovary
D. $\qquad$
13. Explain each of the following terms:
(i) gender means being male or female
(ii) peer group a group of people of a similar age and with similar interests
$\qquad$
14. State two rights of the child.
(i) love, understanding, grow up with their family
(ii) receive education, protection, food, clothing, shelter
15. What is the purpose of a fuse in an electrical circuit? $\qquad$
$\qquad$
a fuse is a deliberate weak link in an electrical circuit, safety device, _ if a fault occurs the fuse blows to prevent further damage
16. Suggest two ways in which the ozone layer can be protected.
(i) choose ozone-friendly aerosols, choose CFC free packaging
(ii) dispose of fridges carefully
17. Explain the importance of the work triangle in kitchen design $\qquad$

the position of the fridge, cooker and sink in an imaginary triangle to allow
for efficient work in the kitchen, ergonomics
$\qquad$
18. Give two factors which should be considered when choosing a family home.
(i) cost, location, local amenities
(ii) family stage, personal preference (e.g. style)
19. State one desirable property and one undesirable property of wood flooring.
(i) desirable property easy to clean, durable
(ii) undesirable property hard under foot, dusty
20. Give two examples of synthetic fibres and suggest a different use for each one.

| SYNTHETIC FIBRE |  | USE |  |
| :--- | :--- | :--- | :--- |
| (i) | Nylon, Polyester | (i) | underwear, clothing |
| (ii) | Acrylic, PVC | (ii) | carpets |

21. Name the stitch shown in the diagram and state one use for it.

Name slip-hemming
Use turning up a hem
$\qquad$
$\qquad$
22. Explain each of the following terms:
$\qquad$
(ii) straight grain threads running parallel with the selvage
$\qquad$
23. Explain what each of the following symbols indicate.
$\qquad$

hot iron

$\qquad$
do not dry clean
24. Give two body measurements that are required when buying jeans.
(i) waist, hips
(ii) leg length

Coimisiún na Scrúduithe Stáit State Examinations Commission

## JUNIOR CERTIFICATE EXAMINATION 2006

## HOME ECONOMICS

## HIGHER LEVEL

$\qquad$
FRIDAY 16 JUNE - AFTERNOON 2.00-4.30

## SECTION B <br> (220 MARKS)

## INSTRUCTIONS

Answer FOUR (4) questions from this section; all questions carry equal marks.

## SECTION B

## 220 Marks

1. The following information is displayed on the label of a carton of fortified milk.

## Fortified Milk

| NUTRITIONAL INFORMATION | FORTIFIED MILK | WHOLE MILK |
| :--- | :--- | :--- |
| Typical Values per 100ml |  |  |
| Energy | $205 \mathrm{~kJ} / 49 \mathrm{kcal}$ | $269 \mathrm{~kJ} / 64 \mathrm{kcal}$ |
| Protein | 3.4 g | 3.3 g |
| Fat | 1.5 g | 3.5 g |
| Carbohydrate | 5.2 g | 4.9 g |
| Calcium | 166 mg | 118 mg |
| Vitamin A | $120 \mu \mathrm{~g}$ | $52 \mu \mathrm{~g}$ |
| Vitamin B | 0.24 mg | 0.17 mg |
| Folic Acid | $70 \mu \mathrm{~g}$ | $6 \mu \mathrm{~g}$ |
| Vitamin D | $1 \mu \mathrm{~g}$ | $0.03 \mu \mathrm{~g}$ |
| Vitamin E | 1.5 mg | 0.09 mg |

(a) Using the information given on the label above, evaluate the nutritive value of fortified milk.

Expect ref. to five nutrients/energy
Name each nutrient and state the quantity of each
Make a comment on each nutrient e.g. function in body, type etc.
(b) (i) State which type of milk would be most suitable for (i) an energetic child and (ii) a pregnant woman.
(i) energetic child: whole milk
(ii) pregnant woman: fortified milk
(ii) Give one reason for your choice in each case.
(i) more energy for active children, more fat, children should drink full fat milk
(ii) higher in calcium for growing bones higher in folic acid to prevent neural tube defects lower in fat as pregnant women not as active
(c) Explain why milk is pasteurised.
kills bacteria, prolongs shelf life
5
(d) (i) List three dairy products, other than milk, available in supermarkets.
cream, cheese, butter, yogurt, ice-cream
(ii) Suggest three ways to include more dairy products in the diet. grate cheese over baked potato, make home-made pizza have yogurt as snack food, add butter/milk to mashed potato top desserts with cream/ice cream, etc.
(e) Explain one of the following: fortified or homogenised.
fortified: extra nutrients added during processing homogenised: dispersing fat throughout milk
2. Vegetarian diets are becoming more popular in Ireland today.
(a) Give three reasons why people may choose a vegetarian diet.
disagree with killing animals, peer pressure, healthy option religious reasons, cheaper diet, fashionable, etc.
(b) Explain each of the following types of vegetarian diets:
(i) vegan diet: lives on plant and cereal foods, does not eat meat, meat products, poultry, fish, dairy products or eggs
(ii) lacto-vegetarian diet: does not eat meat, meat products, poultry but does eat dairy products and eggs
(c) List the guidelines that should be followed when planning meals
for a vegetarian.
use only vegetable stock and vegetable fats, balanced menu, variety, use whole cereals, use TVP, use soya milk, include nuts and pulse vegetables, etc.
(d) Design a balanced three course dinner menu suitable for a lacto-vegetarian.

Must have three courses:
Starter/Soup 2
Main course 4
(0/4 for main course if meat/fish included)
Dessert 2
Menu format \& sequence 2
Balanced menu 2
(e) (i) What is TVP?
(4)
a meat substitute made from soya beans, textured vegetable protein
(ii) Suggest two dishes in which TVP can be used.
spaghetti bolognese, chilli con carne, lasagne burgers, shepherd's pie, etc.
3. (a) Describe each of the following types of shopping outlets:
(4x4)
Expect explanation and example for full marks
(i) supermarkets: large grocery shop, self service, long opening hours, e.g. Dunnes, Tesco, Londis, Centra, Supervalu.
(ii) department stores: large store with several different departments under the one roof e.g. shoes, electrical, clothing, household etc. e.g. Roches Stores, Arnotts, Brown Thomas
(iii) specialist shops: a shop that usually sells one product e.g. shoe shop, bakery, electrical shop etc.
(iv) independent shops: family owned shops, not affiliated to larger company e.g. local small shop
(b) List the guidelines that should be followed when shopping for goods and services.
(4x3)
make a list and stick to it, shop around to compare prices, avoid impulse buying, cut down on the number of shopping trips, be environmentally friendly, keep receipts, avail of special offers, check expiry dates, check out guarantees, etc.
(c) (i) Name three methods of payment that can be used when shopping. cash, credit card, laser, cheque
(ii) Give one advantage and one disadvantage of each method listed.

Advantages: Cash: easier to budget, quick
Credit card: don't need to carry cash, buy now pay later
Laser: don't need to carry cash, money taken out of account Cheque: don't need to carry cash, money taken out of account Disadvantages: Cash: can be easily stolen

Credit card: takes time, need PIN no., high interest rates charged Laser: must have money in account, takes time, need PIN no., Cheque: need banker's card, must have money in account
(d) Explain the benefit to the consumer of each of the following:
(i) unit pricing: is good for comparing prices of similar products e.g. price per gram/kg
(ii) keeping a receipt: easier to return goods for refund/exchange, serves as proof of purchase
(iii) own-brand goods: often cheaper foods, good quality produce made by large supermarkets e.g. Tesco, Dunnes
4. (a) Name the four types of permanent teeth.
(4x3)
Incisors, Canines, Pre-molars, Molars
(b) Outline the function of each of the following parts of the tooth:
(i) enamel: covers the tooth and protects the tooth
(ii) pulp cavity: contains the nerves and blood vessels that keep the tooth alive
(iii) cementum: holds the root of the tooth firmly in the jaw
(c) List the guidelines that should be followed to maintain healthy teeth.

Expect 1 point related to diet and 1 point related to dental hygiene
Visit the dentist every six months, brush teeth at least twice a day, use dental floss, change toothbrush every three months, use toothpaste with fluoride, use disclosing tablets to highlight plaque, reduce amount of sugary foods and fizzy drinks, eat crunchy fruit, eat foods rich in calcium and Vitamin D, etc.
(d) (i) What is plaque?
a mixture of saliva, food particles and bacteria which form a sticky coating on the teeth.
(ii) Explain how plaque affects teeth.

If not removed from the teeth plaque causes dental decay and gum disease. Bacteria react with food which forms acid. The acid attacks the enamel of the tooth. This decay can result in a hole in the tooth which eventually reaches the pulp cavity. At this stage pain is felt as nerves are exposed.
(e) Name the mineral that is added to the public water supply to strengthen teeth.
5. (a) Explain two methods of heat transfer.
(2x5)
Conduction: heat passes from molecule to molecule along a solid object. Metals are good conductors of heat. Example is poker heating up in a fire.
Convection: when gases or liquids are heated they become lighter and rise. They are replaced by cooler gases/liquids. Convection currents is the movement of the molecules of gas/liquid. Example is water boiling (liquid) and oven heating up (gas).
Radiation: Heat travels in straight rays from the heat source to the first solid object it hits, but does not heat the air in-between. Often glows red. Example is grilling.
(b) (i) Name three fuels used for home heating. oil, gas, electricity, solid fuel
(ii) Give two advantages and two disadvantages of one of the fuels named.

Advantages: quick, clean, efficient, no storage needed,
heats water, easy to use, no fumes or ashes, easy to regulate, regular bills, etc.
Disadvantages: dries the air, does not heat the water,
involves work, ashes and smoke, dirty, not easy to control, causes pollution, storage needed, irregular bills, etc.
(c) Outline the benefits of using a central heating system in the home.
the whole house is heated to a comfortable temperature, often heats the water, rooms can be individually heated, can be operated with a timer switch, boiler can be outside
(d) List four ways of saving energy when using a central heating system.
turn down the thermostat, insulate the house well, switch off heat in vacant rooms, keep doors closed, buy fuel in bulk, use a timer, line curtains, get boiler serviced once a year, etc.
(e) What is the function of a thermostat? to regulate the temperature. Uses a bimetallic strip.
6. (a) Name the parts of the sewing machine labelled $\mathbf{1 , 2 , 3}$ and 4.
(4x3)

$$
\begin{aligned}
& 1=\text { spool pin } \\
& 2=\text { hand wheel } \\
& 3=\text { stitch length regulator } \\
& 4=\text { foot pedal }
\end{aligned}
$$

(b) List the guidelines that should be followed when
(i) choosing a sewing machine
cost of the machine, reliable brand name, guarantee, special features, attachments, ease of use, after sales service, etc.
(ii) using a sewing machine
read instructions, thread carefully, adjust stitch length, test on a spare piece of fabric, use foot pedal gently, guide fabric, leave needle in when turning corner etc.,
(iii) caring for a sewing machine
keep dust free, cover when not in use, get serviced regularly, oil moving parts, never use without fabric, etc.
(c) Give one reason for each of the following sewing machine faults:
(i) needle breaking
top tension too tight, needle too fine, needle bent, needle incorrectly inserted, loose presser foot, pulling out fabric before raising needle,
(ii) looped stitches incorrect threading, tension too loose,
(iii) thread breaking
needle incorrectly inserted, poor quality thread, top tension too tight, incorrect threading,
(d) Suggest a different machine stitch suitable for each of the following
(i) appliqué zig-zag, machine embroidery
(ii) turning up a hem zig-zag, straight stitch

