

# **EXAMINATIONS COUNCIL OF SWAZILAND Junior Certificate Examinations**

# CONFIDENTIAL November 2018

# JUNIOR CERTIFICATE EXAMINATION CONSUMER SCIENCE PAPER 2 540/02

MARK SCHEME

100

MAXIMUM MARK

#### **SECTION A**

#### **QUESTION 1:**

(a)	) Definition	of terms:
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**Under nutrition** <u>-</u> occurs when a person consumes too little food or insufficient nutrients in the diet.

**Diet -** total intake of food and drinks w consume each day.

[2]

#### (b) List of vitamins in food items:

- (i) Spinach Vitamin A
- (ii) Citrus Fruits Vitamin C
- (iii) Carrots Vitamin A
- (iv) Kidney Vitamin A
- (v) Whole wheat Vitamin B

[5]

## (c) Minerals found in the egg yolk and their functions

Iron - necessary for the formation of haemoglobin of the blood

Calcium- aids in clotting of blood

- forms bones and teeth

**Sulphur** - helps in formation of animal protein and bile.

[4]

## (d) Information on a label of preserved food

- -They state the name of the preserve
- date on which they are packed given
- Ingredients used are listed
- Best before date to determine freshness (Any two)

[2]

#### (e) Foods items prone to contamination

- Meat (beef, mutton, goat, pork, fish poultry)
- Offal
- Milk and milk products
- Relishes and soups from vegetables and pulses
- Fruits and vegetables

[3]

(f) Reaso	ns for controlling cockroaches			
- th	ey contaminate food			
- th	ey leave bad smell on food		[2]	
(g) (i) Do	oors are given finish for:			
<b>-</b> pı	rotection from rain, easy cleaning and	d to give a glossy finish		
(ii)	Example of a finish - paint / varnish	1	[2]	
(h) Ways	s of conserving fuel			
- ba	ase of saucepan should match with the	he size of the plate		
- Sá	- saucepan should have a flat base			
- S\	- switch off plate before removing saucepan from heat			
- Sa	aucepan should have a well-fitting lid		[2]	
(g) Matc	hing the conditions for cleaning a	window:		
Ra	iny day - Streaks			
Ve	ry cold day - Cracks			
Usi	ing a dry cloth - Scratches		[3]	
			[25 marks	
QUESTIO	<u>IN 2</u>			
(a	) Fruits rich in vitamin A			
	- Orange			
	- Pawpaw			
	- Tomato	(Any two)	[2]	
	(b) Micro-organisms causing spoil	age		

yeast, moulds, bacteria

[3]

# (c) Importance of thiamine in the body

- release of energy from carbohydrates
- normal functioning of nervous system

- for growth (Any two) [2]

#### (d) Rules considered when planning for meals for adolescents

- nutritional needs for individual family members
- all meals should be balanced
- money available
- the occasion for which the meal is required and the number of people to be fed
- cooking facilities available.
- time available
- seasons of the year
- climate /weather
- capabilities of the cook
- shopping facilities
- Variety in terms of: (flavour, colour, texture, cooking methods, garnish.

(Any three) [3]

# (e) Description of a wrinkle test

- Put spoon full jam on a plate/saucer
- Allow to cool
- Push jam with spoon /finger if it forms wrinkles, it is set. [3]

#### (f) (i) Kinds of waste for composting:

- fruit and vegetable peels / organic waste [2]

#### (ii) How to dispose broken glass

Wrap on newspaper and dispose

- Bury in ground [2]

(g) Points	on buying stoves for a stud	ient living in a single room il	al.
- ch	noose a stove that is affordab	le, efficient and durable	
- th	e size of the stove should sui	t the size of the room	
- be	est to buy from a local firm, w	here repair service is prompt a	nd easy
- th	e parts of the stove should fit	easily to allow	[3]
(h) Cleanin	g a stained plastic bowl		
- soa	ak bowl in bleach		
- was	sh in soapy water		
- dry	well		[3]
(i) Reasons	s for cleaning of drains reg	ularly	
- pre	vents attracting flies/pests		
- avo	oids development of bad sme	lls	[2]
			[25 marks]
QUESTION	<u>1 3</u>		
(a) Ingredie	ents used in batters		
plain	flour, liquid, salt		[3]
(b) Classes	s of salads according to inc	gredients used	
Vege	etable salads - e.g. mixed ve	egetable salad	
Fish	or meat salads - e.g. cooke	d salads	
Fruit	ts salads - plain salads		[3]
(c) Nutrien	ts in maize germ		
- fat,	protein, vitamin B, phosphor	us, iron, calcium	
		(Any three)	[3]
(d) Functio	ons of phosphorus in the bo	ody	
- forr	m strong bones and teeth		
- reg	ulates body fluids		
- rele	ease energy from foods	(Any two)	[2]

#### (e) Healthy eating guidelines for people living with diabetes

- have regular meals
- cut down on salt
- cut down on fat
- limit sugar intake
- eat more fruit, vegetable and pulses (Any three) [3]

# (f) Common faults in flour mixtures

Lumpy sauce - not stirring continuously during cooking

Sour bread - over fermenting, dough left warm for too long

Sunken fruit - wet mixture

Short and crumbly pastry - too much fat used, too little water used [4]

# (g) Functions of sink parts

**Overflow pipe**-passes from the sink basin through to the outside wall, opening into a gully

**Plug/stopper**-prevents solid material from passing into the drainage pipe, blocking it when emptying the sink basin.

**U-band**- it traps water, prevents gases which cause bad odours from moving back into the house [3]

#### (h) Differences between an electric and a coal stove

- Insulation/ heating up
- Ease of cleaning
- Thermostat availability in ovens
- Cooking surface area
- Products of combustion [4]

[25 marks]

#### **QUESTION 4**

#### (a) Definition of terms:

**Stain -** a mark or discolouring of something that is not easily removed.

Raw edge - the edge where material has been cut, unfinished

[2]

#### (b) Factors to consider when choosing fasteners are:

- suitable in size and weight for the type of fabric being used
- sewn on double fabric always.
- should lie flat when fastened.
- should be completely concealed
- should match the colour of the garment
- should be fastened on the correct side.

(Any three)

[3]

#### (c) Rules for stain removal

- Identify the cause of the stain e.g. protein, grease so that you know what chemical to use to remove it
- Identify the type of fabric which have been stained, stain removing agents can damage delicate fabrics
- Use simple methods first

[3]

#### (d) Characteristics of a good soap

- (i) The cleaning power should be effective
- (ii) It should give a good lather
- (iii) It should not dissolve quickly
- (iv) It should be firm

(Any three)

[3]

#### (e) Points to be considered when cutting out pattern pieces from fabric

- check that all pattern pieces are correctly placed on fabric
- Use a good pair of scissors, cut with long even strokes
- Using left hand, keep fabric in position
- do not lift the fabric, but move around
- cut around balance marks

[4]

# (f) Uses of stitches in the following processes:

**Blanket stitching -** neatening of raw edges, attach zip tapes to seam allowance, for decoration

**Overcasting -** neatening raw edges that might fray

Hem stitches - hold down folded edges, e.g facings, hems

[3]

# (g) Order for laundry processes

- (i) Soaking
- (ii) Washing
- (iii) Rinsing

(iv) Blueing

[4]

# (h) How to clean a hot iron

- switch off the hot iron and unplug
- rub it with an iron cleaner

- wipe using a dry cloth

[25 marks]

[3]

#### **QUESTION 5**

#### (a) Definition of terms:

**Detergents** - these are cleaning agents which are added in water in order to make laundry clean.

**Laundry** - washing or cleaning of clothes made from different types of fabrics.

[2]

# (b) Factors influencing choice of laundry equipment.

- (i) The size of family, if the family is large, a lot of time will be spent on laundry.
- (ii) The amount of space available for storing laundry equipment.
- (iii) The availability of electricity. (Any two) [2]

#### (c) Stating the care label symbols that can be found on a garment

- washing
- drying
- ironing
- bleaching
- dry cleaning [5]

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#### (d) Reasons for laundry steps

**Sorting-** to organise laundry into groups of articles that need different treatment and those with stains.

**Rinsing-** to remove soap and soda that will develop a dirty white or yellow a Appearance.

**Drying-** clothes keep a better colour as they are bleached and will have a fresh smell [6]

# (e) Functions of sewing equipment.

**Pinking sheers -** decorating, neatening fraying fabric

Seam ripper - undoing seams, opening button hole [2]

# (f) Properties shared by cotton and linen

- strong and durable
- good conductor of heat
- stronger when wet (Any two) [2]

# (g) Armhole finishes suitable for a child's dress

- (i) Using facings
- (ii) Using cross way strips/bias binding
- (iii) Setting in sleeves. (Any two) [2]

# (h) Points to be considered when buying a sewing machine.

- price
- -amount of sewing to be done.
- weight of the machine itself
- -ease of servicing
- extra features you require such as embroidery stitches, button hole
  attachment

[25 marks]

# **QUESTION 6**

# (a) Matching items

Linen - vegetable fibre

**Denim** - cotton fabric

Silk - Animal fibre [3]

(b) Filament fibre - long continuous fibres

[1]

(c) Methods of controlling fullness in children's clothes

- gathers and pleats

[2]

# (d) Meaning of abbreviations:

Chain - ch

Slip stitch - ss

Knit - k

Yarn over- yo [4]

# (e) Types of collars suitable for a boy's school shirt

- Roll collar

- Stand collar [2]

## (f) Definition of laundry terms:

**Cleaning agents -** are non-soap chemical substances added to water in in order to make laundry clean.

**Soft water -** rain water with no impurities

**Refuse** - waste or garbage that is considered useless [3]

#### (g) Advantages of using detergents in laundry.

- They lather well even in hard water
- Some are made for cold water washing
- Some powders are enriched with enzymes for extra brightness and stain removal
- Best suited for heavily soiled garments

[3]

# (h) Advantages of using a temperature control iron.

- It makes ironing of different kinds of fabrics easier
- The combination of dry and steam iron is suitable for pressing and ironing all all types of fabrics
- They maintain the required temperature for different fabric types. [3]

#### (i) Care for galvanised laundry equipment.

- avoid chipping as rust will occur on exposed surface
- use warm soapy water or salt to remove scum, rinse and dry thoroughly. [4] [25 marks]