**441/1**

**HOME SCIENCE**

**PAPER 1**

**THEORY**

**JULY / AUGUST 2019**

**TIME: 2 ½ HOURS**

**MARKING SCHEME**

**TRIAL ONE EVALUATION TEST**

**Kenya Certificate of Secondary Education 2019**

**MARKING SCHEME**

1. **State two ways of preventing athletes’ foot. (2 marks)**

* Wearing dry socks and shoes
* Cleaning in between toes thoroughly
* Drying in between the toes
* Not sharing shoes and socks

1. **State four precautions to take in order to avoid accidents in the home. (2 marks)**

* Being tidy
* Not being absent-minded
* Not doing tasks hastily
* Avoid carelessness
* Not using faulty equipment
* Repairing torn rugs
* Wiping spills immediately they occur

1. **Define the term “blanching.” (1 mark)**

* Dipping of vegetables in boiling water for 10 – 15 minutes.
* Removing and dipping in cold water for same duration of time

1. **Identify four reasons for missing menstruation apart from pregnancy. (2 marks)**

* Change of climate
* Anxiety /stress
* Change in diet
* Some family planning methods interfere with hormones in the body causing hormonal imbalance
* Menopause

1. **Outline six precautions to take when cleaning glass utensils. (3 marks)**

* Buff with a dry lint-less cloth
* Should not be washed with cold water
* Should not be dried after washing, allow to drip dry on a rack
* Should not be stuck in each other
* Store carefully
* Protect from knocks and sharp blows
* Avoid extreme temperatures
* Glass utensils from the fridge to be placed in a bowl of hot water before putting in an oven
* Avoid harsh abrasives

1. **Mention four factors to consider when using cosmetics. (2 marks)**

* Get advice from experts before use
* Read and understand instructions before use
* Avoid using on broken skin
* Avoid using in case oif skin irritation
* Use sparingly
* Wash face before sleeping to allow the skin to breathe
* Check expiry dates on packages
* Remove nail polish when it starts flaking.

1. **State four factors to consider when selecting fabric for the school blouse. (2 marks)**

* Should be strong to withstand frequent washing
* Should be absorbent
* Should take in dyes easily
* Should be crease-resistant
* Should be moth proof
* Should be shrink-resistant

1. **In what four ways is the environment polluted? (2 marks)**

* Throwing litter around the compound
* Disposing animal and human waste on the compound
* Industrial wastes that come from factories
* Waste water that may be offensive to sight and smelly
* Open sewage that spills into land
* Smoke from burning substances
* Construction / demolition waste

1. **Mention three reasons for including vegetables in the diet of the elderly. (3 marks)**

* Provide Vitamin C and traces of Vitamin B
* Provide mineral salts – leafy vegetables have calcium and iron
* Give carbohydrates in form of sugar e.g. carrots
* Provide proteins e.g. cauliflower, Brussels sprouts

1. **State four functions of water in the body. (2 marks)**

* Prevent dehydration
* Helps in digestion of food and also keeps the digestive system moist
* Water contains minerals which are responsible for bone and teeth formation
* Formation of all body fluids
* Excretion of waste materials from kidneys
* Maintaining body temperature by perspiration

1. **State two ways in which ignorance may lead to malnutrition (2 marks)**

* Improper preparation and cooking of food
* Eating the wrong combination of food
* Depriving the family nutritious foods by selling them and buying less nutritious ones
* Following food taboos

1. **Give two reasons for folding in flour in creamed cake mixtures (2 marks)**

* To avoid losing enclosed air in the mixture
* To trap more air

1. **Why is it important to have a charcoal jiko burning in a well-ventilated room? (2 marks)**

* Incomplete combustion of charcoal produces carbon monoxide gas that combines with haemoglobin to form carboxy-haemoglobin that is poisonous.

1. **State four reasons for using carpets in the house. (2 marks)**

* For decoration
* To add warmth
* To reduce noise
* To hide faults
* To protect the floor
* For easy maintenance
* To improve the appearance of floors

1. **Suggest three ways of conserving energy when using a gas cooker. (3 marks)**

* Turn on only when required
* Take good care of the cooker for it to operate efficiently
* Employ other cheap methods of supplying energy
* Use the correct sized pots & pans

1. **Identify two functions of openings on a garment. (2 marks)**

* To allow easy putting on of the garment and taking off the garment
* Decorating the garment
* Introducing a style feature

1. **State two reasons for covering food while cooking. (2 marks)**

* To prevent loss of nutrients
* To quicken cooking hence save on fuel
* To keep off germs
* To retain flavor of foods
* For the food to cook faster

1. **State two factors to consider when setting the table. (2 marks)**

* The number of people eating the meal
* The number of course in the meal
* Cutlery and crockery required

1. **Outline four principles of food preservation. (2 marks)**

* Application of heat
* Removal of water
* Exclusion of oxygen
* Freezing
* Adding sugar, salt , acids and chemical preservatives

1. **State any two pieces of information found on a receipt. (2 marks)**

* The name and address of the seller
* The date of the sale and exact description of the goods
* The quantity of goods
* The price charged

**SECTION B (COMPULSORY) 20 MARKS**

1. **You are planning to host your sister’s graduation party at home. In preparation for the occasion:**
2. **Outline the procedure you would follow to thoroughly clean the plastic chairs to be used for the occasion. (6 marks)**

* Dust the chairs to remove loose dirt
* Use warm soapy water with a sponge/sisal fibres to remove the dirt
* Rinse in warm water to remove soap and dirt
* Finally rinse using cold water to freshen
* Dry well with a clean dry cloth
* Dry them under shade to dry completely
* Store appropriately

1. **Describe the procedure you would follow when laundering a loose coloured handkerchief. (8 marks)**

* Soak in cold salty water to facilitate removal of mucus and blood stains
* Rinse off the salty water
* Wash the handkerchief in warm soapy water using kneading and squeezing
* Rinse in warm water to remove soap and dirt
* Finally rinse in cold water into which a pinch of salt has been added to fix colour
* Dry under shade on a clothes line secured with pegs
* Use a warm iron to press while still damp
* Air, fold and store appropriately

1. **Describe the method you would use to clean a varnished wooden table to be used for the occasion. (6 marks)**

* Dust with a soft duster to remove loose dirt
* Clean using a soft, clean cloth wrung out of warm soapy water to remove dirt / clean using a clean cloth wrung out of warm soapy water into which vinegar has been added. For every one litre of water add one tablespoon of vinegar
* Rinse with a clean cloth wrung out of warm water to remove soap and dirt
* Finally rinse with a cloth wrung from cold water to freshen the table
* Dry thoroughly using a soft cloth to rub the surface to make it shine

**SECTION C – 40 MARKS**

1. **a) Identify six qualities of aluminium that make it suitable for making kitchen utensils. (6 marks)**

* It is light
* It has a silvery appearance so attractive
* It has a low melting point compared with other metals
* It is a good conductor of heat which makes it ideal for cooking
* It does not break easily
* It does not rust

**b) State six characteristics of buffet service. (6 marks)**

* Drinks are served on a separate table
* Food is placed at a point where service starts
* Plates/cutlery are placed on the table at a the starting point
* There are a variety of dishes on offer/choice
* It is convenient for large groups of people
* Guests may eat while standing or sitting
* The food should be easy to eat with or without cutlery
* Guests move from left to right on the queue

**c) Outline four disadvantages of re-heating food. (4 marks)**

* Easily gets contaminated / goes bad
* Loses its flavor / lose taste
* Loses some of the nutrients
* Loses its usual colour / turn colour / changes colour
* Loses its texture / be soft / be hard

**d) Explain four situations that would require one to wash hands to prevent spread of diseases. (4 marks)**

* Before eating
* After visiting the toilet
* During preparation of food
* After doing dirty jobs / tasks

1. **a) Explain four advantages of being able to draft patterns rather than using commercial ones. (8 marks)**

* *Economical* – one does not have to buy the commercial patterns which are expensive.
* *Availability* – one is able to produce a pattern any time it is required instead of depending on commercial ones which may not be readily available.
* *Fitting* – the pattern will be drafted to the right measurements for the figure and therefore garments made would fit the figure well.
* *Self-satisfaction* – one would feel the self-satisfaction and pride in drafting one’s own pattern.
* *Money generating* – the knowledge of pattern drafting can be used to teach those who don’t have it and charge a fee for the tuition. Variety of pattern drafting can be made to make many garments for sale.

**b) Describe the procedure of working a single point dart. (6 marks)**

* Fold dart along the fold line so that the fitting lines arte matching.
* Pin and tack from the wider end tapering to a point to hold the two layers of fabric firmly.

**RS**

**WS**

Fold line

Stitching line

* Remove pins and machine stitch along the tacking line from the wider end tapering to a point.
* Secure the stitches at the point of the dart
* Remove the tackings
* Press to correct direction.

**c) State six characteristics of a good ironing surface. (6 marks)**

* Should have a loose cover
* Should be clean
* Should be firm
* Should be smooth
* Should be covered with fabric that resists high temperatures
* Should be colour-fast to avoid staining

Should be well-padded

24.a). **Factors that can affect normal foetal development**

* Sexually transmitted infection (STIS) e.g. gonorrhoe can be passed from the
  + mother to child during childbirth especially on the eyes causing blindness
  + - HIV /AIDS may cause the baby to suffer from full-blown AIDS and dies before the fifth Birthday.
* Alcohol and smoking may cause the baby to be under weight during birth
* Drugs, even some of the prescribed ones can lead to miscarriage.
* Trauma can also cause miscarriage
  + - German measles may deform the foetus if it occurs during the first three month of pregnancy
* Nutrient deficiency may cause the baby to be mentally and physically

Retarded (any 6x1=6mks)

(b) **Six advantages of person to person advertisement over print media**.

* Consumers are able to inspect the goods as opposed to just reading.
* More information is available when they meet promoters.
* Consumers’ are likely to get free samples.
* Not all people are able to read
* One is able to see the efficiency of an item
  + - The promoter is able to get to the level of the consumer. (any 6x1=6mks)

**(d) Discuss four reasons why the use of charcoal should be minimized. (8mks**)

* Tree cutting for charcoal burning is a threat to the environment

as it leads to desertification

* Charcoal burning causes air pollution – making the air unfit for human consumption
* When used in a poorly ventilated room, it produces carbon monoxide which can cause death by suffocation
* Charcoal is not clean in storage and requires bigger storage space
* If not properly burnt, it produces a lot of smoke that blackens the cooking utensils.