HOME SCIENCE FORM 4 PAPER 1 MARKING SCHEME

SECTION A (40MKS)

1. State four methods of removing loose dirt from surfaces. (2mks)
* Dusting
* Brushing
* Sweeping
* Use of vaccum cleaner
1. Suggest any two reasons for laundering clothes. (2mks)
* To remove dirt
* To prolong their life
* To give the wearer confidence
1. Give two negative effects of bicarbonate of soda in wheat flour. (2mks)
* It gives it unpleasant taste/smell
* Destroys vitamin B group
* Give a dark yellow colouration
1. Mention two reasons for blanching vegetables during preservation. (2mks)
* To help retain colour
* To reduce bulk
* To kill any living organisms
* To help retain some nutrients
* To stop enzyme activity
1. Suggest two reasons why knots should not be used when making permanent stitches. (2mks)
* Can tear the fabric
* Can undo and stitches get damaged
* Causes tiny lumps when fabric is pressed
1. State two principles of wise buying. (2mks)
* Do window shopping to compare prices/quality in different shops
* Buy versatile items
* Prepare a shopping list to avoid impulse buying
* Give priority to most important goods.
* Buy the latest designs/durable
1. Differentiate between essential and non essential amino acids. (2mks)
* Essential amino acids are not synthesized by the body and must be provided by food (proteins) while non essential amino acids are synthesized by the body and must not be supplied by food.
1. List four qualities of a material suitable to make a floor cloth (2mks)
* Should be absorbent
* Should be durable/long lasting
* Should be lintless
* Should be easy to clean/maintain
1. What is the difference between regenerated and synthetic fibres. (2mks)

Synthetic fibres are made purely from chemicals e.g nylon, polyester, acrylics, while generated fibres are made from a mixture of chemicals and natural materials e.g viscose rayon and celebrate rayon

1. Mention two disadvantages of relying on solar energy in the home. (2mks)
* In case of prolonged cloud cover, it means shortage of solar power
* Its use is mainly limited to lighting, ironing but cannot be used for cooking
1. Identify two properties of woolen fibres that make them suitable for making carpets (2mks)
* Warm
* absorbent
1. List four principles of food preservation. (2mks)
* Application of heat
* Use of low temperature
* Exclusion of air
* Dehydration
1. state two effects of poor environmental hygiene in a school setting. (2mks)
* leads to the spread of communicable diseases like typhoid, cholera and tuberculosis.
* Bad odour in the environment
* The environment becomes unsightly
1. state two reasons why family meals should be served punctually. (2mks)
* to encourage appetite especially to young children
* to avoid anxiety associated with delayed meals
* to avoid disruption in routines leading to poor time management
1. give two reasons why a kitchen should be well ventilated (2mks)
* to get rid of surplus heat in the kitchen
* prevent/minimize humidity which may cause discomfort
* to get rid of cooking smells & gases
* to increase free circulation of air reducing concentration of micro-organisms
* to get rid of smoke from fuels used
1. list four methods of controlling fullness in garment construction. (2mks)
* darts - pleats - smocking - shirrap
* gathers - hicks - elastic - easing
1. name two uses of vinegar in laundry work. (2mks)
* final rinsing of loose coloured fabric to brighten their colours
* removal of laundry blue strain
1. Suggest two merits of using self neatening seams in garment construction. (2mks)
* They give a neat finish that needs no extra neatening
* The give a decorative effect when they show on Rs
* They are strong hence the garment lasts long
1. Mention two reasons to account for popularity of convenience foods in Kenya. (2mks)
* Need little or no cooking time hence save on time/labour/fuel
* Have attractive colours compared to fresh food
* They enable one to try new recipes
* Ensure availability of foods that are not in season
* Many people do not have time for meal preparation
1. Give two negative effects of advertising. (2mks)
* Deceptive
* Encourage impulse buying
* Some are against societal values
* Causes overspending
* Wrong prioritising

SECTION B (COMPULSORY) 20MKS

1. You have decided to stay home and carry out some cleaning.
2. Explain how you will launder your woolen socks. (10mks)
* Collect equipment to save time and energy
* Shake off dirt to remove loose dirt
* Take measurements and record to check on shrinkage
* Wash in warm soapy water using kneading and squeezing method to avoid shrinkage and felling
* Rinse in warm water to remove traces of soap and dirt, finally rinse in warm water
* Squeeze out as much water as possible then roll in a clean towel to remove all the water.
* Dry under the shade
* Press with a warm iron placing a cloth between the iron and the socks
* Air fold and store
* Clean and store equipment
1. Describe the procedure you will use to dry clean your father’s silk tie. (6mks)
* Work in a well ventilated place away from any open flames
* Put enough dry cleaning solvent in a bowl
* Shake the tie to remove dirt
* Immerse in the solvent and clean by kneading and squeezing
* Work quickly to prevent the solvent from evaporation
* Squeeze as much solvent as possible
* Hang out dry in an open place
* Press with a warm iron on the Ws
* Let the solvent settle then decant into a bottle
* Discard dirt
1. Explain briefly the procedure you will to clean a painted wooden stool in your bedroom. (4mk)
* Collect equipment
* Use warm soapy water and clean cloth to clean surface.
* Start from the bottom to void water marks and clean it with the cloth wrung out of the warm soapy water
* Rinse with the cloth wrung out of clean water starting from top working downwards
* Dry with a dry cloth and leave to stand for a while to allow complete drying
* Clean and store equipment

SECTION C (40MKS)

CHOOSE TWO QUESTIONS FROM THIS SECTION

1. a) State and explain four causes of malnutrition (8mks)
2. poverty: this is where the family have no resources like land or money that can be used to produce or buy food. as a result, they consume whatever is available which may not be nutritious.
3. Natural calamities e.g drought/floods: when natural calamities occur people not produce food which may lead to malnutrition
4. Infestation by worms: worms may infest a person and live in the intestines where they absorb digested food causing the person to suffer poor nutrition.
5. Body’s inability to absorb nutrients: this is a condition where an individual may be born with a condition that does not allow the absorption of nutrients such as vitamins leading to poor nutrition
6. Corruption
7. War
8. Ignorance

b) Describe four nutritional needs of manual workers. (4mks)

- meals should be balanced- to supply enough of all nutrients to include proteins, carbohydrates, vitamins, mineral and roughage.

- meals should be served in adequate amount to cater for high appetite

- serve enough fluids inform of juice andother beverages to cater forloss of water through sweating.

- include enough vitamin B group for the release of energy needed for strenuous work

- Serve meals punctually to avoid disruption in the daily work

1. a) State four preparations that should be made on a fabric before cutting out the garment. (4mks)
* press to remove creases
* pre-shrink the fabric
* grain the fabric
* strengthen by pulling the fabric diagonally and along edges to obtain an even shape and size.

b) Describe the process of making a french seam without using diagrams. (6mks)

* place the pieces of fabrics together with the Ws facing and Rs outmost
* match the fitting lines notches and raw edges
* pin and tack 6mm above the fitting line
* remove pins and machine stitch close to the tacking
* remove tacking and press
* trim turnings to 3mm and press open
* turn the work to the Ws and press to line flat
* pin and tack close to the fitting line
* remove pins and machine stitch on the fitting line
* remove tacking and press the seam on both Rs and Ws side

c) Give five causes of falls at home. (5mks)

* slippery/wet floor
* poorly lit rooms/areas/corridors/staircases
* peels of vegetables on the floor/litter on the floor
* poor arrangement of furniture
* uneven floor

d) Mention five factors that may affect the life of the unborn baby. (5mks)

* poor nutrition: if the mother is not well nourished the baby maybe born underweight or malnourished
* alcohol/cigarette smoking can cause baby to be born underweight.
* STI/HIV- can be transmitted to the unborn baby affecting its immune system/and baby to be born deformed
* Syphilis may cause blindness during birth
* Traum -anything that causes shock to the mother may cause miscarriage
* Germar measles may cause congenital deformities
* Drugs /substance abuse ca cause miscarriage or low birth weight
1. a) Suggest four points to consider when choosing a colour scheme for a room. (8mks)
* existing colour scheme- The colour scheme builds on the existing décor hence enhancing the appearances of the room.
* Use of the room – various rooms require different colour schemesaccording to their use. E.g sitting room needs warm and comfortable colours while bedroom requires cool colours for a peaceful and relaxing atmosphere

b) state four reasons for using facings on a garment. (4mks)

* To finish raw edges
* To decorate the garment
* To provide enough thickness for sewing on fasteners
* To give body and shape the garment

c) Mention four advantages of food preservation. (4mks)

* Ensure adequate food supply when food is out of season
* Enables transportation without food getting spoiled
* Prevent waste when food is in surplus
* Supply food in different forms eg jam, jelly

d) Give four points to consider when choosing a sewing machine. (4mks)

* Cost should be reasonable
* Popular model to get enough spare parts
* Seller should provide after sales services
* Amount of work to be done
* Versatile
* Have manual
* Ensure all parts are available/working