**441/1**

**HOMESCIENCE THEORY**

**PAPER 1**

**Marking Scheme**

**DECEMBER 2021**

**ELDORET DIOCESE EXAM 2021**

***Kenya Certificate of Secondary Education (K.C.S.E.) TRAIL***

**SECTION A**

1. **Methods of cooking using dry heat**  (Any 2X1=2 MARKS)

- Baking

* Roasting

1. **Types of tacking stitches. (2 marks)**

* Even tacking
* Tailors tacking
* Long and short tacking
* Basting/ Diagonal tacking (Any 2X1=2 MARKS)

3. **Types of hand sewing needles**

* Betweens
* Crewels
* Darners
* Embroidery
* Sharps (Any 2X1=2 MARKS)

1. **Ways of enhancing personal health.**

* Give body proper cleaning
* Take balanced diet
* Take proper rest
* Do enough exercises
* Dress well (Any 2X1=2 MARKS)

1. **Advantages of baking as a cooking method**

* If temperature is properly set it does not require a lot of attention.
* Foods are light and easy to digest.
* Baking saves on fuel since several dishes can be cooked at the same time.
* Foods baked are attractive and appeasing. (Any 2 X1=2 MARKS)

1. **Methods of ventilation**

* Adjacent method.
* Cross method. (Any 2 X 1=2 MARKS)

1. **Ways of reducing a bulk in a seam.**

* Trimming
* Layering
* Pressing flat (Any 2X1=2 MARKS)

1. **Items in the house that can be recycled**

* Plastic papers can be used for lining surfaces
* Old tins can be used as utensils
* Plastic containers can be washed then used to store ingredients

Carton box can be used keeping clothes, or some stuff in the house.

* Old clothes can be used as dusters, Any 2 X1=2 MARKS)

**9. General functions of minerals in the body**

- Building of bones and teeth

- Maintaining all cells in the body e.g. muscles, nerves, brain and blood cells

- Controlling body processes and enabling them to run smoothly (Any 2X1=2 MARKS)

**10. Kitchen hygiene** – refers to cleanliness of surfaces, equipment and proper disposal of refuse. (Any 2X1=2 MARKS)

11.**Colour schemes that are used for interior decoration.**

- Monochromatic colour schemes (one colour plan)

- Complementary scheme.

- Triad harmonies

- Analogous (Any 2X1=2 MARKS)

12. **Functions of sebaceous glands in the skin.**

- Production of sebum which keeps the skin supple.

- Produce sebum which makes the skin water proof.

- Produce sebum which destroys disease causing micro-organism.

(Any 2X1=2 MARKS)

**13. Uses of a seam ripper**

- Cutting button-holes

- For picking out stitches. (Any 2X1=2 MARKS)

14. **Agents used in coating food during deep frying.**

- Bread crumbs

- Egg white

- Thin batter (Any 2X1=2 MARKS)

15. **Factors that determine size of a patch pocket.**

- Purpose of the patch pocket

- Position of the pocket

- Size of the garment

- Age of the wearer. (Any 2X1=2 MARKS)

16. **Points to be observed when washing articles with non-fast colour**

- The garments should be washed using the kneading and squeezing method

- The garment should be hanged under shade

- Use moderate iron when ironing (Any 2X1=2 MARKS)

**17. How to identify silk using burning test**

- Burns with spluttering noise and is self extinguishing.

-Gives the smell of burnt feathers or hair. (Any 2X1=2 MARKS)

**18**. **Ways of enriching leftover foods**

* Adding vegetables
* Using species
* Serving together with vegetables / salads
* Garnishing
* Adding stock
* Coating some food (Any 2X1=2 MARKS)

**19.** **Disadvantages of using candles for lighting**

* + - * + Get finished quickly
        + No sufficient light
        + Easily put off by wind
        + Can cause accidents easily (Any 2X1=2 MARKS)

**20. Uses charcoal as fuel**

* For cooling in a charcoal coder
* For cooking
* Ironing (Any 2X1=2 MARKS)

**SECTION B (20 MARKS)**

21.)

**a) Description of washing a neglected aluminum pan**

- Collect equipment and material needed ( ½ )

- Wash (½) in hot ½ soapy ½ water using scouring pad ½

- Rinse ½ severally ½ using hot ½ water.

- Wipe dry ½ with a kitchen cloth ½

- Clean equipment used (½ )

(any 8x1/2 = 4 marks)

**b)** **Explanation of thorough cleaning an enamel plate.**

**-** Collect equipment and material needed (½) to save on time (½ )

- Removal of loose dirt/dispose scrapes of food (½) to keep water clean (½)

- Use a sponge (½) and warm soapy (½) water to remove dirt and prevent scratches (½) and remove dirt (½)

- Rinse thoroughly in warm (½) water to remove dirt and soap (½)

- Final rinse in cold (½) water to freshen (½)

- Drip dry/upside down on a rack (½) to remove water (½).

- Store (½) in a clean cool dry place to maintain (½)

- Clean (½) equipment used to maintain (½) (any 14 x ½ = 7 marks)

**c) Procedure of cleaning a hurricane lamp (omitting the glass)**

* Collect equipment and materials *(½) necessary for the work.*
* Protect *(½)* the surface using old newspapers*(½)*
* Dismantle the lamp *(½)*and place the glass chimney on a clean dry place
* Empty the kerosene into a clean dry container *(½)*
* Put hot soapy water*(½)* inside the reservoir close the opening and shake the lamp *(½)*
* Rinse *(½)* thoroughly using warm *(½)* water
* Shake *(½)* off excess water
* Wipe off soot *(½)* using a newspaper especially the chimney
* Clean the frame chimney and handle using warm *(½)* soapy *(½)* waterand a soft cloth/sponge*(½)*
* Rinse *(½)*  thoroughly
* Drain off excess water by placing it upside down *(½)*on a clean surface
* Trim *(½)* the wick
* Reassemble *(½)* the lamp
* Refill *(½)* with kerosene
* Clean equipment and materials *(½)*  used ( any 18 x ½ = 9 marks )

**SECTION C (40 MARKS)**

22 a) **Points on conservation of energy in lighting.**

- Lighting in various parts of the house should be designed to suit a particular area

- Use lightly colored surfaces as they reflect light and distribute it better than dark ones

- Daily light should be used as much as possible. Artificial light should be used only for dark hours

- Ensure that all light fittings e.g. shades, covers etc are clean and in working order

- Turn off lights when not in use even for short periods

- Avoid using bulbs with high voltage than really required (any 5 x 1 = 5 marks)

**b) Suitable conditions for the growth of yeast**.

(i) **Food**, this is provided by the sugar in the flour / Limited amounts should be used since too much of it will rupture the yeast cells retarding the fermentation process.

1. **Warmth** , the working conditions must be warm 25°C / Hot temperatures will

kill the yeast and cold temperature will retard the growth of the yeast.

1. **Liquid** , this is provided by the water or milk used in the mixture/ It is used for the formation of the solution in which fermentation process takes place.
2. **Time,** this is provided by allowing yeast mixture to ferment and proof.

(any 3x2 = 6 marks)

**c ) Preparation of a shaped round patch pocket and attachment.**

- Neaten ½ the top edge ½ of the pocket

- Snip / notch ½ the turnings ½ of the curves (½),

- Fold ½ the allowance ( ½ ) along the SL ( ½ ) to the W.S ( ½ ) of the pocket.

- Pin ½ and tack ½ in place ½

- Stitch (½ ) the pocket along the S.L ½ and re enforce ½ the mouth .

- Trim ½ the corners ( ½ ) of the pocket ½ .

- Press ( ½ ) the pocket flat ½ .

(any 18 x ½ = 9 marks )

23 a ) **Advantages of stewing as a method of cooking.**

-Economical method of providing a meat dish from a cheap cut of meat through slow

prolonged cooking

-The gravy (liquid part) of the food is served with the food therefore the nutrients which are in the gravy are not lost

-Does not require close attention during cooking except for occasional stirring therefore other tasks can be performed while the stew is cooking

-With the long slow cooking, natural flavour of food are developed which make the food more enjoyable

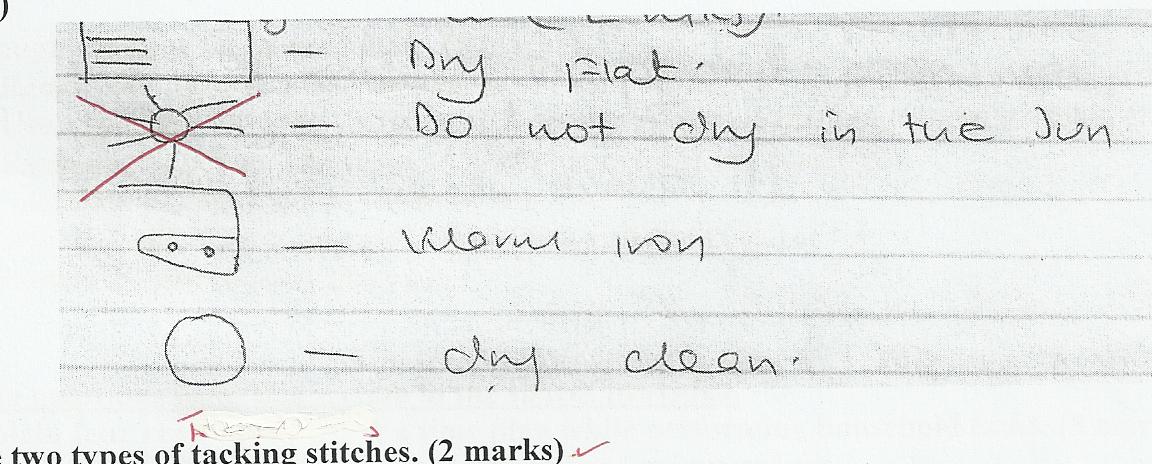
-It does not require special cooking facilities therefore can be carried out successfully even on three stones

-The water soluble nutrients are conserved because the evaporation is minimized through the use of a pan with a lid

-Consumes little fuel therefore economical on fuel

-Prolonged slow cooking tenderizes tough foods (Any 4 pointsx2= 8 marks)

b ) **Different symbols likely to be found on care labels of a woolen garment.**



**c ) Description of how to prepare a front and back facing using one well labeled diagram.**

- Place the two ½ facings R.S ½ facing matching ½ the fitting line.

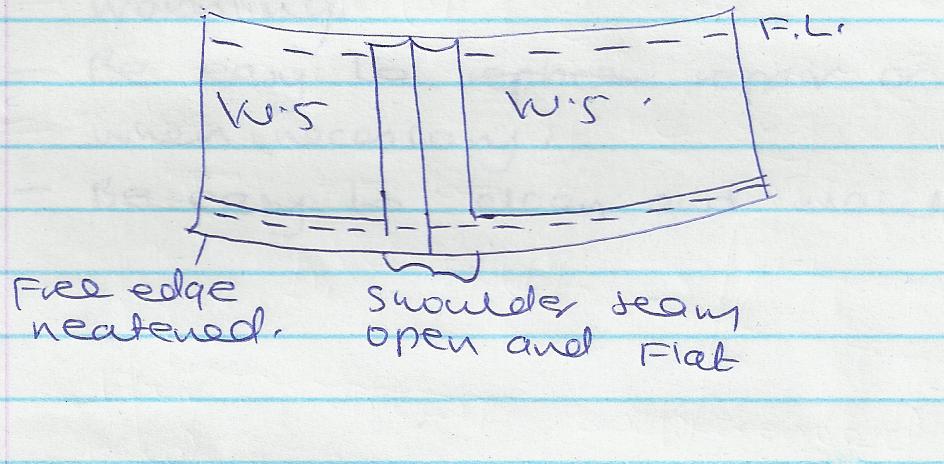
- Pin ½ and tack ½ along the fitting line ½

- Remove pins ½ and machine ½ stitch

- Remove tacking ½ and press ½ seam open ½

- Neaten ½ the free edge ½ .

(Description any 10 points x ½ = 5 marks and diagram 1 mark = 6 marks)



**24 a) Reasons why hospitals would not use silk fabric for their bed sheets.**

* Easily damaged by high temperatures, hospital bed sheets must be frequently sterilized.
* Easily damaged by alkalis and acids – hospital bed sheets are usually stained with medicines and other stains hence require strong fabrics.
* Weakened by long exposure to sunlight – hospital linens are exposed to the sunlight

for further sterilization.

* Silk is weak when wet-hospital linen require frequent washing which silk cannot stand ( any 4 x 2 = 8 marks)

b ) **Precautions to observe when using a micro – wave oven**.

(i) Do not overload

(ii) Do not use metal object to warm food

(iii) Follow manufactures instructions

(iv) Do not start micro – wave without food inside.

(v) Switch off when not in use.

(vi) Don’t let it get too dirty

(vii) Don’t keep the microwave near heating appliance (any 6 x 1 = 6 marks)

**C) Good qualities of a kitchen plan.**

* Working surfaces should be of comfortable height to avoid straining.
* Has sufficient working space for easy movement.
* Working surfaces should be close to each other to avoid too much movement.
* Should be well ventilated and to avoid fatigue.
* Should be well lit to avoid fatigue
* Work centers should allow work to flow from one surface to another to avoid retracing steps. (any 6 x 1 = 6 marks )