

## HOME SCIENCE EXAM

### FORM 3 END TERM 2 2024

#### MARKING SCHEME

1. Give 2 ways how home science is related to the following subjects (2mks)  
a) Chemistry.

Stain removal

Making of detergents

Softening of water

**.b)Geography**

Housing the family

Production of textile fibres

- Suggest 3 major kitchen plans (1 ½ mks)**

U plan

L plan

Corridor plan

One wall plan

2. Give 2 vaccines that are administered at birth (1mks)

BCG

OPV

3. Outline 3 conditions that are suitable for the growth of yeast (1 ½ mks)

Food

Warmth

Liquid

4. Mention 3 points to look for when buying a tape measure (3mks)

Clearly marked in inches and cms on both sides

Have metal ends to avoid fraying

Should be strong to last long

Firmly woven to last long

Plastic coated to avoid stretching and fraying

5. Define food fortification (1mk)

It is the additional of a food nutrient to a given food to improve the nutrient content

6. Mention 3 characteristics that make hard water unsuitable for laundry (3mks)

It is wasteful since a lot of soap is required to form lather

Hard water causes discoloration on boiler

It forms scum with soap thus discoloring the garment

Fur formed causes blockage of pipes

Waste time and energy since it takes a lot of time to form lather

7. State 3 general points on the care of leather shoes. (3mks)

Do not immerse in water to avoid damaging  
Clean after use with a cloth wrung from warm water  
Repair as soon to prevent further damage  
Avoid storing in damp conditions  
Stuff the shoes to maintain shape

**8. Give 2 reasons for a person becoming a vegetarian (2mks)**

Allergy reaction to animal proteins  
Religion and food taboos  
Health status eg diabetic, hypertension  
Personal choice

**9. Outline 3 advantages of advertising.(3mks)**

It is educative giving information to consumers  
Entertaining especially through electronic media  
Creates employment  
Creates competition thus improvement of quality of goods and services  
It makes the consumer aware of goods available in the market

**10. Draw 3 laundry symbols and the meaning (2mks)**

**11. List 3 methods of repairing clothes and household articles (3mks)**

Darning  
Patching  
Redoing gaping seams  
Replacing fasteners  
Repairing hanging hems

**12. Mention 3 factors that influence the choice of a cooking method (3mks)**

Type of food to be cooked  
Time available for cooking  
Type of cooking facilities available  
Health status of the people being cooked for

**13. Define environmental hygiene (2mks)**

It is keeping and maintaining high standards of cleanliness around the environment through proper drainage proper sanitation and proper waste disposal

**14. Differentiate between pressing and ironing (2mks)**

Pressing is placing a warm iron on a section of a garment lifting and placing on another section until all creases are removed while Ironing is moving a hot iron to and from on an article until all creases are removed

**15. Identify 2 balance marks used in garment construction (1mks)**

Dots

Notches

**16 List 4 information found on bread wrapping. (2mks)**

Expiry date

Name of the product

Weight

Batch number

Manufacture date

Ingredients

Address of manufacturer

Kebs mark of quality

Instruction on use

**16. Give another name for the following nutrients**

**Vitamin A**..... Thiamin

**Vitamin D**.....Cholecalciferol

**Vitamin B2** ..... Riboflavin

**Vitamin E**... .. Tocopherol



## SECTION B (20 MARKS)

Answer questions in the spaces provided

17. You are visiting your aunt for the weekend and she is hosting some friends.

Describe the procedure of how you will :

a) launder her white cotton table cloth with fruit juice stain (8mks)

- collect the equipment and materials required  $\frac{1}{2}$
- shake to remove loose dirt
- cover the juice stain with salt  $\frac{1}{2}$  and pour boiling water through it  $\frac{1}{2}$  to remove the stain
- soak in cold  $\frac{1}{2}$  water to loosen dirt
- Wash in hot  $\frac{1}{2}$  soapy  $\frac{1}{2}$  water using friction  $\frac{1}{2}$  method to remove dirt
- rinse thoroughly  $\frac{1}{2}$  using clean hot water  $\frac{1}{2}$  to remove dirt and soap
- final rinse in cold  $\frac{1}{2}$  water adding starch to stiffen the table cloth
- wring out excess water and drip dry  $\frac{1}{2}$  under direct sunlight  $\frac{1}{2}$  supporting with pegs
- iron with a hot iron  $\frac{1}{2}$  while slightly damp  $\frac{1}{2}$  to remove creases
- air to dry completely  $\frac{1}{2}$
- fold and store appropriately
- clean dry and store the equipment and materials used  $\frac{1}{2}$

Any 16 \*  $\frac{1}{2}$

b) Clean her glass jug she used to serve the juice(5mks)

- collect the equipment and materials required  $\frac{1}{2}$
- rinse the remains in warm water  $\frac{1}{2}$
- wash in warm  $\frac{1}{2}$  soapy  $\frac{1}{2}$  water using a sponge  $\frac{1}{2}$  inside and outside  $\frac{1}{2}$
- rinse thoroughly in clean warm  $\frac{1}{2}$  water to remove soap and dirt
- drip dry  $\frac{1}{2}$  on a rack upside down
- buff  $\frac{1}{2}$  to shine with a non-fluffy dish cloth  $\frac{1}{2}$
- store appropriately in a cool dry place
- clean dry and store the equipment and materials used

Any 10 \*  $\frac{1}{2}$

b) Clean her corridor cemented floor.(7mks)

- Collect all cleaning equipment and materials required  $\frac{1}{2}$

- **sweep  $\frac{1}{2}$  the floor from the furthest corner towards the door  $\frac{1}{2}$  collect the dirt and dispose appropriately  $\frac{1}{2}$**
  - **dust the skirting board  $\frac{1}{2}$**
  - **Scrub  $\frac{1}{2}$  the floor using the scrubbing brush  $\frac{1}{2}$  and warm  $\frac{1}{2}$  soapy  $\frac{1}{2}$  water using circular motion  $\frac{1}{2}$  a section at a time  $\frac{1}{2}$  overlapping the sections  $\frac{1}{2}$  to completely remove dirt**
  - **Rinse thoroughly  $\frac{1}{2}$  with a cloth wrung out of clean  $\frac{1}{2}$  warm  $\frac{1}{2}$  water**
  - **Dry  $\frac{1}{2}$  with a dry piece of cloth  $\frac{1}{2}$**
  - **Clean dry and store the equipment and materials used  $\frac{1}{2}$**
- Any 14 \*  $\frac{1}{2}$**



## SECTION C( 40 MARKS)

Answer any 2 questions from this section

20 a) Discuss 4 problems and the possible solutions that may be encountered during weaning (8mks)

- in case of allergic reaction discontinue the food
- If the baby develops stomach upsets give food that are easy to digest
- the food should be prepared under hygienic conditions to avoid development of infections like diarrhoea
- to prevent the baby mother bond becoming weak ensure the mother feeds the baby as much as possible
- start weaning at the right time to prevent baby from becoming Malnourished
- avoid foods with too much fat and carbohydrates to prevent being overweight

b) Mention 4 stitches that are used for neatening raw edges (4mks)

loop stitches

Buttonhole stitches

Overcasting

Machine overlock

c) Describe the making of a french seam (8mks)

- place 2 pieces of fabric wrong sides  $\frac{1}{2}$  facing each other matching the fitting lines raw edges and notches  $\frac{1}{2}$
- pin  $\frac{1}{2}$  and tack 6mm  $\frac{1}{2}$  above the fitting line
- remove pins  $\frac{1}{2}$  and machine stitch along the tacking line  $\frac{1}{2}$
- remove tackings  $\frac{1}{2}$  and trim the turnings to 3mm  $\frac{1}{2}$  and press both wrong side and right side to create a knife edge  $\frac{1}{2}$
- turn the work on the wrong side  $\frac{1}{2}$
- pin  $\frac{1}{2}$  and tack  $\frac{1}{2}$  along the fitting line enclosing the edges completely  $\frac{1}{2}$
- remove pins  $\frac{1}{2}$  and machine along the tacking line  $\frac{1}{2}$
- remove tackings  $\frac{1}{2}$  and press the seam flat  $\frac{1}{2}$

$$16 * \frac{1}{2} = 8 \text{marks}$$

21 a) Explain 4 basic instructions on the use of medicine (8mks)

1. dosage – the recommended amount of medicine to be taken at any one time
2. frequency - refers to the number of times in a day the medicine should be taken
3. duration - refers to how long the medicine should be taken before discontinuation
4. caution- gives warning on possible effects on the medicine

5. **storage** – gives instructions on how then medicine need to be stored
6. **instruction for use** – this shows the direction on how the medicine should be used  
any 4 \* 2 = 8mks

**b) Mention 4 roles of play in child development (4mks)**

improves on blood circulation  
establish interpersonal skills  
gives pleasure to the child  
helps in exercising body muscles  
improves on the rate of excretion  
helps in mental development

**c) State 4 desirable qualities that makes silk suitable for a dinner dress (4mks)**

it drapes well  
doesnot cling to the body  
it is attractive in appearance  
it is crease RESISTANT  
it is non flammable  
it is soft to the skin  
It is strong

**c) Suggest 4 ways of controlling the spread of infections in a school set up (4mks)**

- **Washing hands before eating and after visiting the toilets**
- **Avoid sharing of personal items**
- **People handling food to be vaccinated and undergo regular medical checkup**
- **Treating drinking water with chemicals**
- **Washing the fruits before eating**
- **Isolating the students who are infected**
- **Cleaning and disinfecting toilets and bathrooms**
- **Proper disposal of wastes and sanitary towels**

**22 a) Explain 4 factors to consider when planning meals for an invalid (8mks )**

- **provide the diet prescribed by the doctor**
- **the meal should be well balanced with plenty of protective foods to avoid recurrent of infections**
- **meals should be easy to digest since the immune system is weak**
- **soft foods for easy chewing since they lack a lot of energy**

- serve the food attractively to stimulate appetite
- provide varieties of food for them to choose from
- Avoid foods with spices and fats for they are difficult to digest
- Include fluids and nutritious drinks to aid in digestion and prevent constipation
- Serve food in small quantities and regular intervals to encourage eating

b) Outline 4 points to consider when buying a free-standing cooker (4mks)

- strong to last long
- size of equipment correspond with the storage space
- efficient to perform the task bought for
- availability of fuel to use that is electricity or gas
- well constructed with balance without wobbling
- material that is rust free
- Easy to use with an instruction manual
- Easy to clean
- Affordable cost
- Maintenance and spare parts should be easily available

c) State and explain 4 factors that determine the choice of a seam (8mks)

1. type of fabric – for heavy fabrics use seams that avoid bulkiness for light fabrics use self neatening seams
2. use of the garment – clothes that require frequent wash need a strong seam eg double stitched seam
3. position of the seam – choose an appropriate seam for the area used eg an overlaid seam for yokes
4. style of the garment – choose a seam that introduces a style feature on a garment
5. effect desired – for decorative effects use conspicuous seams with stitches on the right side eg overlaid or double stitched seam