**441/1**

**HOME SCIENCE**

**PAPER 1**

**441/1**

**MARKING SCHEME**

**SECTION A**

**Answer all the questions in this section in the spaces provided- [40 marks]**

1. **State two ways of meeting the physical need of a patient recuperating at home.[2 marks]**

(i). The sick needs to be kept clean

(ii). The bedding should be clean, dry and smooth to keep the patient comfortable

(iii). Proper ventilation of the room as it eliminates chances of further infections

(iv). Keep the sick warm during cold and enhance coolness during hot weather

(v). Ensure the sick is groomed all the time

(vi). Were possible the sick should be given some physical exercises.

(2x1=2 marks)

1. **What does daily cleaning involve? [1 mark]**

It involves the removal of loose dirt and it is done everyday

1. **Give two reasons why it is important to repair clothes. [2 marks]**

(i). Multiple pregnancy

(ii). pre-mature rapture of membranes

(iii). Abnormalities of the placenta

(iv). Maternal diseases

1. **Mention two disadvantages of Braising as a cooking method. [2 marks]**

(i). Vegetables used are over cooked

(ii). It is a low method of cooking

1x2=2maks)

1. **Give two demerits of using hard water when washing clothes. (2 marks)**

(i). Does not lather well with soap

(ii).Creates or forms scum

(iii). Leaves marks on basins and bath tubs

(iv). Form ‘fur’ in kettles and hot water pipes

(1x2 =2 mark)

1. **State two causes of premature birth. [2 marks]**

(i). Number of people eating the meal

(ii). Number of courses in the meal

(iii). Cutlery and crockery required

(1x2 = 2 marks)

1. **Define the term interfacing [1 mark]**

(i). It is layer of fabric between the facing and the garment (1x1=1 mark)

1. **List down two factors to consider when setting the table [2 marks]**

(i). Number of people eating the meal

(ii). Number of courses in the meal

(iii). Cutlery and crockery required (1x2 = 2 marks)

1. **State two ways through which safe parenthood is achieved. [1 marks]**

(i). Meeting the nutritional needs of the mother

(ii). Social preparation of the expectant mother

(iii). Psychological preparation of the expectant mother

(iv). Voluntary counseling and testing (VCT) of HIV of the parents

(2x1/2 = 1 mark)

1. **Give two advantages of using solar as a source of fuel. [2 marks]**

(i). No monthly bills

(ii). Clean and easy to use

(iii). Safe to use

(1x2 = 2marks)

1. **List down the three main methods of attaching collars to neck line. [3 marks]**

(i). by a collar which is self-neatening

(ii). by band method/Sandwiching

(iii). By use of a facing/cross way strip

(1x3 = 3 marks)

1. **Give two factors to consider when planning for the lighting of various rooms in the home. [2 marks]**

(i). Size of the room

(ii). purpose of the room

(iii). Colour scheme of the room

1. **Mention two dangers of poor ventilation in a room. [2 marks]**

(i). Suffocation and fainting

(ii). Drowsiness

(iii). Discomfort

(iv). Easy transmission of communicable diseases

(1x2 = 2marks)

1. **State two disadvantages of advertisements. [2 marks]**

(i). Can led to impulse buying

(ii). Can be misleading

(1x2 = 2 marks)

**15. Mention three minerals found in milk [3 marks]**

(i). Calcium

(ii). Potassium

(iii). Phosphorus

(1x2 = 2 marks)

(1x2 = 2 marks)

**16. Give two functions of a clothes horse. [2 marks]**

(i). Used to dry clothes indoors in cold weather

(ii). Used to air clothes after ironing

(iii). Used for storage of clothes

(1x2 = 2marks)

**17. Give two undesirable properties of silk that make it unsuitable for underwear.**

**[2 marks]**

(i). weak when wet

(ii). Sweat stains are difficult to remove

(iii). Sensitive to alkalis or strong detergents

(1x2 = 2 marks)

**18. The diet of elderly persons is affected by the physiological changes which occur in the body at this stage. State two of these changes. [2 marks]**

(i). Decreased volume of acidity of the gastric juice

(ii). Decreased rat of absorption

(iii). Loss of teeth hindering eating of some foods

(iv). Low rate of metabolism

**19. Mention two points on the precautions to take when a child has diarrhoea.(2 marks)**

(i). Use sterilized equipment

(ii). Give a lot of water especially dehydration solution

(iii). Person handling baby equipment should wash hands thoroughly.(1x2 = 2marks)

20. **Define the term weaning**  (2 marks)

* This is the gradual introduction of semi solid foods to a baby (1x1) = 1 mark

21. **Give two** causes of puckering of the material during stitching. (2 marks)

(i). When thick needle is used on a fine fabrics

(ii). A blunt needle

(iii). Tension too tight

(1x2 = 2 marks)

**SECTION B – [20 marks]**

**COMPULSORY QUESTION**

***Answer this question in the spaces provided at the end of section C***

**22. You are planning to host small children who will attend your younger brother’s birthday Party.**

**(a). Giving reasons outline the procedure you will use to thoroughly clean a plastic table to be used by the children. (6 marks)**

* Wash in hot (1/2) soapy (1/2) water to remove fixed dirt (1/2) using a soft cloth (1/2) or sponge to prevent scratching (1/2)
* Rinse (1/2) thoroughly in hot (1/2) water to remove traces of soap (1/2)
* Dry (1/2) completely and rub or buff with a soft cloth (1/2) to shine (1/2)
* Store appropriately (1/2x12=6 marks)

**(b). Outline the steps to follow when laundering your brother’s acrylic socks. (9 marks)**

* Soak (1/2) in cold (1/2) water for a short time
* Wash (1/2) in warm soapy(1/2) water using kneading and squeezing method(1/2)
* Rinse(1/2) thoroughly in warm water(1/2)
* Give a final rinse (1/2) in cold water(1/2) to refresh
* Add fabric conditioner (1/2) in the final rinsing waters.
* Drip dry(1/2) under a shade(1/2) and secure with pegs (1/2) by the toes(1/2)
* Press(1/2) using a warm (1/2) iron
* Air (1/2) to dry completely
* Store (1/2) appropriately

(1/2 x18 = 9 marks)

**(c). Outline the procedure to follow when cleaning a plain wooden chopping board that you will use. ( ½ x 10 marks)=5**

* Clean with warm soapy (1/2) water and a scouring (1/2) pad to scrub (1/2) the surface
* Rinse (1/2) thoroughly in warm water (1/2)
* Give a final rinse (1/2) in cold water (1/2)
* Wipe (1/2) with a dry cloth
* Leave in a warm airy place (1/2) to dry completely
* Store appropriately (1/2)

**SECTION C [40 marks]**

**Answer any TWO questions from this section in the spaces provided at the end of this section.**

**23. [a]. Explain three factors that determine the choice of a seam (6 marks)**

* Type of fabric
* For heavy fabric use an open seam to avoid bulkiness for light fabrics use self-binding seam like the French seam
* Use of the garment

Clothes that require frequent washing use a strong seam

* Position of the seam

Use the appropriate seam for the area being stitched e.g. overlaid seam for attaching yokes

* Style

They can be used as a style feature on garments e.g. a machine fell seam stitched with a contrasting colour of thread to appear decorative 1mk for mentioning

1 mark for explaining 2x3=6 marks

**[b]. Mention four qualities of a well-made seam (4 marks)**

* Strongly stitched to last long
* Accurately stitched to maintain a good line
* Neatly stitched to enhance appearance
* Matched where they cross or met each other
* Of appropriate width and equal in all parts of garment
* Well pressed and flat

1x4=4 marks

(c). Briefly explain the procedure of making an open seam. (6 marks)

* Place the R S(1/2) of the materials together
* Pin (1/2) and tack(1/2) along the fitting line(1/2)
* Remove pins (1/2) and machine along the F.L(1/2) Remove tackings(1/2)
* Open(1/2) the seam and press(1/2) flat(1/2)
* Trim (1/2) the raw edges and neaten (1/2) the seam. (1/2 x12=6 marks)

**(d). Give four methods of finishing a hem. (4 marks)**

* Binding
* Hemming
* Use of a facing
* Use of lace
* Use of a frill (1x4=4 marks

**24. (a). Fill in the missing information. [10 marks]**

A-Natural Fibrers

B-regenerated fibres

C-animal fibres

D-cotton/linen/jute

E-asbestos

F-linen/cotton/jute

G-Jute/linen/cotton

H-nylon/polyester/acrylic

J-viscose rayon/acetate rayon

**(b). (ii). Discuss typhoid under the following stub-headings**

**(a). Cause (1 mark)**

Bacterium salmonella typhi

**(b). Signs and symptoms of typhoid (3 marks)**

* High fever
* Severe headaches
* Severe diarrhoea
* Nausea
* Loss of appetite

**(c). Prevention and control. (6 marks)**

Proper disposal of feaces and urine

* Domestic water should be boiled or chlorinated before drinking to kill any bacteria present
* Proper hygiene practices such as washing hands before handling food and after visiting the toilet
* Food preparation and service utensils should be washed thoroughly before use.
* Fruit and vegetables should be washed thoroughly in cool boiled water before being served
* Those handling food should be clean and should undergo regular medical checkups to ensure they are not carriers of communicable diseases.
* Vaccination-the typhoid vaccine contains weakened typhoid bacteria and can provide immunity for up to two years

**25. (a). Give four reasons why food should be stored properly (4 marks)**

(i). Stay fresh for a longer period

(ii). Avoid loss of nutrients

(iii). Prevent contamination by micro-organisms and chemical

(iv). Keep away from destructive household pests e.g. Weevils. (1x4=4)

**(b). Explain four traditional methods of preserving foods (8 marks)**

(i). Smoking-food is coated with a thin film of smoke and is dried with the heat the smoke generates

(ii). Addition of ashes-the grains are mixed with the ashes and put in gourds or pots.

(iii). Ripening of milk into fermentation/sour milk fermentation is introduced by mixing some already fermented milk with fresh boiled ad cooled milk

(iv). Pickling and chutneys

Pickling-the vegetables are allowed to stand overnight in a strong salt solution or they can be sprinkled with salt to draw water out of them. Then they are packed into jars filled with spiced vinegar.

Chutneys-a mixture of fruits and vegetables flavoured with sugar, seasoning and spices is cooked in vinegar then stored in hot jars.

(v). Sun-drying-food it’s like vegetables or fruits are dried in the sun to remove moisture. Then they are stored in dry jars

1mk for mentioning

1 mark for explaining (2x4 = 8mrks)

**(c). Mention five symptoms of food poisoning. (5 marks)**

(i).Severe vomiting

(ii). Diarrhoea

(iii). Severe abdominal pain

(iv). General body weakness

(v). Fever and headache (1x5 = 5marks)

**(d). Mention three desirable qualities of a container for storing drinking water. (3 marks)**

(i). It should be made of a material which does not rust

(ii). It should have a fitting lid/cover

(iii). It should be easy to clean

(iv). It should be able to keep the water cool. (1x3=3 marks)