



MARKING SCHEME THE ROYAL EXAM SERIES

Kenya Certificate of Secondary Education



441/1 — HOME SCIENCE — Paper 1

1. Give two uses of fruits in cake making. (1mark)

Adds flavor and nutrients

Help to preserve and keep the cake if used in large quantities

2. Name two types of pleats (1 mark)

Inverted pleat

knife pleat

Box pleat

3. Name the biological raising agent used in bread making (1mark)

Yeast

4. List two methods of incorporating air into flour mechanically (1mark)

Creaming

Sieving

Whisking

Rubbing in

Beating

Folding

5. Give two functions of sebum (1mark)

Makes the skin water proof

Keeps the hair and epidermal cells supple this prevents cracking of the skin

Contains substances that destroy disease causing micro organisms

6. State two ways in which a country with home scientists will benefit (1mark)

The individual acts as a role model in his or her chosen career

The individual renders service to the nation thus raising the living standards of the people i.e. teaching

7. Mention two minerals needed for healthy teeth (1mark)

Calcium

Phosphorus

Fluorine

8. List any two ways of finishing wood (1mark)

Staining

polishing

varnishing

laminating

9. Mention two advantages of charcoal as a fuel (1mark)

Its flexible in use –can be used for cooking, heating and as an abrasive

Good charcoal doesn't produce smoke

charcoal ash can be used as an abrasive

10. Define the following terms: (1mark)

a) Fixed dirt

Its loose dirt that gets stuck on a surface after coming into contact with water or grease

b) Fracture

Cracked or broken bones

11. Identify other two causes of anaemia other than nutritional deficiency (1mark)

Excessive bleeding

menstrual bleeding

12. Give two reasons for food fortification (1mark)

Prevents nutritional deficiency disorders

Improves their nutrient value, flavor, texture and appearance.

13. Highlight two ways of conserving vitamin C during the storage of kales(1mark)

Vitamin C is easily destroyed by air thus should not be stored for a long time

Should store in a cool place away from direct sunlight

14. Mention two signs and symptoms of marasmus (1mark)

Extreme loss of weight

There is no fat under the skin

The child looks like an elderly person because of the wrinkled face

The ribs can be seen clearly

The eyes protrude and the child is alert or anxious

The hair may look normal but the head will look big in comparison to the rest of the body

15. Write the following abbreviations in full (1mark)

a) AIDS

Acquired immune deficiency syndrome

b) TBA

Traditional birth attendant

16. Give two functions of the S and U bend below every sink in the disposal of waste water from the house (1mark)

Prevents back flow of water

Prevents bad odour

17. Detergents are classified into two groups. Name them (1mark)

Soaps detergents

Soapless detergents

18. Mention two rules to observe in stain removal (1mark)

Stains should be removed while still wet

Identify the stain and the type of fabric affected in order to use a suitable stain remover

If the composition is unknown start with milder stain removal method, such as soaking washing according to fabric followed by use of solution of milder reagents

In removing the stain work from the outside towards the inside to avoid spreading the stain

19. Name two the stain removal agents used in removing a banana sap stain from your t-shirt (1mark)

Paraffin

Turpentine

20. Identify two methods suitable for disinfecting a kitchen towel (1mark)

Use of steam

Boiling

21. List two ingredients used in the making of laundry blue (1mark)

Clay

Charcoal

Sulphur

Sodium sulphate

Soda ash

22. Give two points to observe when taking body measurements (1mark)

When taking round body measurements always put two fingers between the tape measure and the body.

The person whose measurements are being taken should wear a simple outfit to facilitate accurate measurements.

To obtain a natural waistline tie a tape measure around the waist

The person whose measurements are being taken should stand upright.

23. Name two conspicuous seams used to bring out style features in garment construction (1mark)

Overlaid seam

Run and fell seam

Double stitched seam/ machine fell seam

24. Give two examples of stitches used to neaten raw edges (1mark)

Overcasting

Loop stitch

25. Mention two possible causes of stitches looping when sewing with a sewing machine (1 mark)

Incorrect threading

Upper and lower tension too loose

26. List two examples of haberdashery /sewing notions in garment construction (1mark)

Threads

Buttons

zips

Ribbons

Hooks and eyes

Elastics

Laces

27. Name two methods of constructing a fabric from a yarn (1mark)

Weaving

knitting

Crocheting

Netting

28. Outline two examples of synthetic fibers (1mark)

Polyamides

Polyester

Acrylonitrile/acrylics

Elasto fibers

29. Differentiate between aerobic and anaerobic food spoilage (1mark)

Aerobic food spoilage is caused by microorganisms in the presence of oxygen.

Anaerobic food spoilage occurs within the interior of food parts in sealed containers where oxygen is either absent or present in limited quantities.

30. Apart from kitchen knife, identify one other type of knife and give its function. (1mark)

Paring knife(vegetables)

Palette(pastry)

Fruit knife

Bread knife (bread)

Butchers knife

Carving knife

31. State two roles of advertisements (1mark)

Quite effective way of passing information about a new product

Good advertising offers additional information about the product

Inform the consumer on the availability of certain goods or services and how to access them

Gives information on the varieties available for specific product

32. Point out two styles of food service (1mark)

Family/ country service

Buffet

Tray service

Blue-plate

33. Outline two functions of darts in clothing and construction processes (1mark)?

Give a good fit/shape

Add to the fashion features

34. List two examples of basic pattern symbols and markings in garment construction (1mark)

Notches

Cutting line

Alteration line

seam line

Seam allowance

Direction arrows

Darts

Grain line

35. Identify two suitable textile fibers for making lingerie (1mark)

Lycra

Spandex

36. Mention two methods of treating water at home (1mark)

Boiling

Filtration

Sedimentation

37. Give two reasons for cleaning a house (1mark)

Preservation of appearance

Prolong life of an article/surface

Ensures healthy environment

Psychological satisfaction

To cut down on costs

38. Outline two advantages of flats/apartments type of houses (1mark)

Land is utilized more economically because several housing units are built on the same plot

Building materials are utilized more economically because walls are shared.

39. Suggest two ways of managing foreign body in the ear (1mark)

Gently flush out with warm water or vegetable oil

In case of an insect turn the head such that the ear is facing the ground for the insect to crawl out

Don't use a finger to remove the object as it may push it further.

40. Mention two dangers that arise from misuse of cosmetics (1mark)

Bleaching

Causes skin irritation

Cosmetics with mercury and hydroquinone can damage the user's internal organs

SECTION B (Answer all the questions)

41. You are doing thorough cleaning at home on a Saturday morning. Describe how to;

- a) Clean a white washable cotton mask you had used the previous day. (8marks)
- b) Sweep an earthen sitting room floor (7marks)
- c) Wash a Calabash that had been used to take porridge in the morning for breakfast.(5 marks)

41. You are doing thorough cleaning at home on a Saturday morning. Describe how to;

- a) Clean a white washable cotton mask you had used the previous day. (8marks)
Collect the equipment and materials to save on time and energy
Shake to remove loose dirt
Soak for 30 minutes in cold water to loosen the dirt
Rinse out of the soaking water.
Wash by friction method in hot soapy water to remove fixed dirt
Rinse in hot clean water to remove soap and dirt.
Final rinse in cold water into which a disinfectant has been added to freshen and to kill germs.
Wring out excess water to facilitate quick drying
Dry on a clothesline in the sun secured with pegs to remove moisture and prevent falling.
Iron using a hot iron to remove creases
Air to dry completely
Fold and store appropriately
Clean the equipment used and store appropriately
- b) Sweep an earthen sitting room floor (7marks)
Collect materials and equipment to save on time and energy
Move the light furniture to one side of the room or to the center
Close the windows and doors to prevent dust from being blown about by the wind.
Sprinkle water on the floor to minimize dust that gets blown about.
Sweep from the farthest corner of the room towards the door methodically.
Maintain a good posture to avoid fatigue. Trap as much dust in the bristles by ensuring that the broom is kept down. Sweep with long, low strokes to avoid raising the dust too much.
Gather the dust together and collect using a dust pan and dust pan brush and dispose appropriately.
Rearrange the furniture and open the windows and doors to make it neat and freshen the room.

Dust all the surfaces using a duster to remove loose dirt that may have settle on them during sweeping.

Clean the equipment used and store appropriately

- c) Wash a Calabash that had been used to take porridge in the morning for breakfast.(5 marks)
Collect the equipment and materials to save on time and energy
Soak the calabash to loosen food remains
Rinse out of the soaking water.
Clean with warm soapy water and soft cloth/sponge to remove fixed dirt to prevent scratches.
Rinse thoroughly in warm water to remove all soap and dirt
Place upside down on rack under the shade to drain water
Store in a cool dry place to avoid dampness which causes moldering
Clean the equipment used and store appropriately

SECTION C (Answer only two questions from this section.)

42.

- a) Explain four factors to consider when planning meals(4marks)
b) Explain three merits of credit cards (3marks)
c) Explain four importance of immunization (4marks)
d) Describe how to make hand worked gathers (4marks)
e) State five points on the choice of brooms and brushes (5marks)

43.

- a) Outline three steps in preparing a budget (3marks)
b) Give the importance of table setting (4marks)
c) Explain the importance of breastfeeding to a child (3marks)
d) Outline four qualities of a well-made stitch (4marks)
e) Explain three ways in which detergents aid in removal of dirt (6marks)

44.

- a) Explain three reasons for making a shopping list prior to the actual buying (3marks)
b) Use the following dishes to organize a breakfast menu (3marks)
Tea with milk, Fried liver, Boiled arrowroot, Fresh passion juice, Wimbi porridge
c) Explain four ways of handling temper tantrums during habit training (4marks)
d) Describe how to make a plain seam on a skirt yoke (4marks)
e) Draw six care labels on drying in laundry work and explain the meaning of each (6marks)

42

- a) -In case of emergency a consumer can access goods and services
-it can be used any time of day or night

- some credit cards give cash credit
- its relatively safer to carry than carrying cash money
- It is not bulky
- it's convenient to use
- it saves time and energy

- b) -Balanced diet
- c) -Family customs and traditions
 - Religious beliefs
 - Individual requirements
 - Time available
 - Money available
 - Fuel available
 - Texture of the foods
 - Climate /season
 - The occasion
- d) -Saves life by protecting the child from fatal diseases likely to occur during childhood
 - Saves money that would have been spent on medical bills in case of illness
 - Eradicates illness such as smallpox
 - Prevents emotional, physical and mental agony and mostly disability.
- e) -Work the two rows of gathering stitches 0.6cm above and below the fitting line
 - Secure threads on one end using a pin
 - Pull the threads to get the required width
 - Secure the threads on the other end to prevent gathers from coming out
 - Distribute the gathers evenly.
- f)
 - Brushes should be closely and firmly fixed on to the head.
 - The head should be smooth and curved at the edges to avoid damaging furniture
 - Bristles should be hard/soft and pliable depending on the purpose
 - Depending on the type, handle should be smooth and of comfortable length
 - Wooden parts should be appropriately finished for easy cleaning
 - One end should be firmly fixed into head .the other should have a depression
 - Buy for the right purpose
 - Broom should be light in weight

43

- a) -Establish and list down all the needs and wants of the family
 - Out of the list of family needs identify which are fixed and incidental expenses
 - Prioritize the needs and wants in their order of importance
 - Estimate as accurately as possible how much each of the needs will cost
 - Add up the total costs for fixed and incidental expenses
 - If the total expenditure is less than the income the balance can be saved
- b) -Gives an atmosphere of orderliness
 - Attractive table and the general presentation stimulates appetite

- The family gets together and is able to socialize
- Parents are able to teach table manners to their children

c) -Breast milk contains antibodies that passively immunize a child against some diseases

- Fosters a close and loving relationship between the baby and the mother
- Breastfed babies are protected against diarrhea, colds and flu
- A baby digests breastmilk easily this means fewer stomach problems
- Suckling helps develop the baby's jaws and teeth

d)

- Stitches should be correct, firm and neat should not appear on the right side unless decorative
- The color of thread should match that of fabric unless a different color is desired
- The stitches should be fastened on and off neatly and firmly
- Stitches used should be of correct tension to avoid puckering the fabric

e)

- Detergents lower the surface tension of water thus increasing the wetting action on clothes
- Emulsifies dirt /breaks it into small particles to facilitate its removal by water.
- Surrounds the dirt particles which have been disclosed from the clothes to prevent them from being re deposited back until they are rinsed out

44.

a)

- Helps prevent impulse buying by buying only the items on the list
- Acts as a guide to wise buying by prioritizing spending
- Enables one to spend only on the intended items
- Facilitates the realistic use of income one is able to reflect on the goods to be bought against the income

b)

Fresh passion juice
XXXXXXXXXXXXXXXXXXXX
Wimbi porridge
XXXXXXXXXXXXXXXXXXXX
Fried liver
Boiled arrow roots
Tea with milk
XXXXXXXXXXXXXXXXXXXX

c)

- d)
- Place two pieces of fabric together with the RS facing
 - Match the fitting lines and the raw edges
 - Pin and tack along the fitting line
 - Remove pins and stitch along the fitting line
 - Remove the tackings and finish off the threads
 - Trim the seam allowance to about 1CM and neaten the two edges together
- e)