

MURANG'A EAST 2025 JOINT EXAM

HOMESCIENCE PAPER 1 MARKING SCHEEM

SECTION A (40 MARKS)

1. Three functions of carbohydrates in the body
 - *Provision of heat and energy*
 - *Storage of glycogen*
 - *Roughage aids in digestion and prevents constipation*
 - *Cellulose increases food bulk giving satiety value*
 - *Carbohydrates have sparing effect on proteins* (3*1=3 marks)
2. Two methods of preserving fruits at home without using a refrigerator
 - *Jam making*
 - *Pickling/ chutneys*
 - *Drying/ dehydration*
 - *Use of honey/ sugar* (2*1= 2 marks)
3. Identify two changes that occur when cooking ugali (2 marks)
 - *Gelatinizing and thickening of the starch*
 - *It produces a good smell/aroma*
 - *The part in contact with the pan start browning*
4. Distinguish between meal planning and meal management. (2 marks)

Meal planning involves deciding what is to be eaten by individuals in order to meet their nutritional requirements while meal management involve acquiring ingredients, preparing, cooking and serving the food
5. Define the term Blanching as used in cookery (1 mark)
 - *Blanching is a cooking process where food, typically vegetables or fruits, is briefly immersed in boiling water or steam, then immediately plunged into ice water to halt the cooking process. This technique is used to preserve colour, texture, and flavour, and is often a preparatory step before freezing or other preservation methods.*
6. Suggest two characteristics of meat that have been overcooked by roasting (2 marks)
 - *The meat dries due to loss of moisture*
 - *The meat colour blackens/darkens*

- *It has a bitter flavour/ burnt taste*
 - *It becomes tough to chew*
 - *Its nutrients have been destroyed*
7. Highlight two limitations of burning as a method of refuse disposal (2 marks)
- *Fumes causes air pollution*
 - *Destroys land fertility*
8. Three advantages a family will have if they make the family budget together. (3 marks)
- *Budgeting helps the family minimize unnecessary spending*
 - *Helps the family to save income*
 - *Helps them to give priority to essential items thus minimize impulse buying*
 - *Helps the family identify needs and cater for basic need*
 - *Enables the family to live within their means, spending on items they can afford*
 - *Every member is psychologically satisfied*
9. Name the three layers that make a box pleat (1.5 marks)
- *Surface*
 - *Underfold*
 - *base*
10. Suggest three ways of controlling fires in the Home Science lab during food and nutrition practical. (3 marks)
- *Covering all the food ingredients*
 - *The dustbin should be emptied regularly*
 - *The spills should be wiped immediately they occur*
 - *The dustbin should be well lined and with a tight fitting lid*
11. List two conspicuous seams. (1 marks)
- *Overlaid seam/lapped seam*
 - *Machine fell/ double stitched seam*
12. Explain two ways through which variety of flavour can be achieved during meal management (2 marks)
- *Developing natural flavour of food by frying food with onions*
 - *Mixing different ingredients*

- *Adding various flavouring ingredients eg herbs, spices and essences*

13. Mention three vaccines that are given by injection during child immunisation schedule (1.5 mark)

- *BCG*
- *DPT*
- *Yellow fever vaccine*

14. State three reasons of starching clothes (3 marks)

- *To stiffen the fabrics / give them body*
- *To give smooth finish making clothes stay clean longer/ make them dirt resistant*
- *Gives clothes a glossy surface/ enhances appearance*
- *The texture of fibre is preserved*
- *It retains the colour of the garment*

15. Give two uses of asbestos fabric (2 marks)

- *Used to make theatre curtains*
- *Makes protective clothing for fire service officers*
- *Used as an insulator in electrical appliances*

16. Mention three characteristics of a well-made dart (3 marks)

- *The dart tapers to a point/Nothingness*
- *It is inconspicuous on the R.S*
- *The dart fell on the W.S faces towards the C.B, C.F or the waistline*
- *The stitching line is straight*
- *The dart is firmly secured at the point*
- *The fell of the dart is flat where it meets the seam*
- *The length and width of the dart is the correct size depending on the pattern piece.*

17. Identify two benefits of solar energy that makes it popular in Kenya today (2 marks)

- *It is a renewable source of energy*
- *It is readily available*
- *It is cheap to produce as there is no cost apart from installation*
- *It is clean to use*
- *It is quick to use*
- *Does not require much storage*

- *Available even in areas where there is no supply of hydro-electric power*
- *Can easily be converted to alternating current for wider uses in the home*

18. Name two methods of attaching collar (1 mark)

- *Crossway strip*
- *Attaching by sandwiching between facings and revers*
- *Self – neatening method*

19. Give two types of permanent hand stitches used in making a girl's skirt (1 mark)

- | | |
|----------------------------|-----------------------|
| ➤ <i>Running stitch</i> | ➤ <i>Overcasting</i> |
| ➤ <i>Backstitch</i> | ➤ <i>Chain stitch</i> |
| ➤ <i>Hemming stitch</i> | ➤ <i>Satin stitch</i> |
| ➤ <i>Faggoting</i> | ➤ <i>Stem stitch</i> |
| ➤ <i>Loop stitch</i> | ➤ <i>French knot</i> |
| ➤ <i>Buttonhole stitch</i> | ➤ <i>Pin stitch</i> |

20. Scarcity of resources is one of the problems the Kenyan consumers are facing today.

Mention four resources that are scares for the consumer. (2 marks)

- | | |
|-------------------|-----------------|
| ➤ <i>Money</i> | ➤ <i>Time</i> |
| ➤ <i>Goods</i> | ➤ <i>Energy</i> |
| ➤ <i>Services</i> | |

SECTION B 20 MARKS (COMPULSORY)

21. You are at home for midterm break and you intend to do some special cleaning.

Outline the procedure you would follow to;

- a) Clean your white canvas sport shoes that you came home in. (7 marks)
- *Protect the working surface ($\frac{1}{2}$)*
 - *Dust well ($\frac{1}{2}$)*
 - *Remove the laces and wash them in hot soapy water; rinse thoroughly and hung under the sun to dry ($\frac{1}{2}$)*
 - *Scrub ($\frac{1}{2}$) the inside and outside ($\frac{1}{2}$) of the shoes with warm soapy ($\frac{1}{2}$) water using a scrubbing brush ($\frac{1}{2}$)*
 - *Rinse thoroughly ($\frac{1}{2}$) in warm ($\frac{1}{2}$) water*
 - *Final rinse ($\frac{1}{2}$) in cold ($\frac{1}{2}$) water*

- Remove excess water by flicking the shoes while holding the toes ($\frac{1}{2}$)
- Use a sponge /piece of cloth ($\frac{1}{2}$) to apply whitener ($\frac{1}{2}$)
- Dry ($\frac{1}{2}$) in a warm place ($\frac{1}{2}$) slightly inclined ($\frac{1}{2}$)
- Turn to ensure all part is dry ($\frac{1}{2}$)
- Store appropriately ($\frac{1}{2}$)

b) Clean a wooden cooking stick that was used to cook supper the previous night
(5 marks)

- Collect equipment and materials needed ($\frac{1}{2}$)
- Rinse off the food remain ($\frac{1}{2}$)
- Using a soft/ scouring brush ($\frac{1}{2}$) and warm soapy ($\frac{1}{2}$) water, scrub ($\frac{1}{2}$) along the grain ($\frac{1}{2}$)
- Rinse thoroughly ($\frac{1}{2}$) in warm ($\frac{1}{2}$) water
- Final rinse in cold ($\frac{1}{2}$) water to freshen
- Dry ($\frac{1}{2}$) with dry cloth / leave to dry in warm airy
- Clean the equipment and store ($\frac{1}{2}$)

c) Clean a pit latrine around your homestead that has a cemented floor (8 marks)

- Wear protective clothes when washing ($\frac{1}{2}$)
- High dust ($\frac{1}{2}$) to remove cobwebs.
- Remove ($\frac{1}{2}$) the latrine cover, clean by scrubbing ($\frac{1}{2}$) it using hot soapy water ($\frac{1}{2}$) and a toilet scrubbing brush ($\frac{1}{2}$).
- Rinse ($\frac{1}{2}$) in hot ($\frac{1}{2}$) then cold ($\frac{1}{2}$) water into which a Disinfectant ($\frac{1}{2}$) has been added.
- Dry ($\frac{1}{2}$) thoroughly.
- Scrub ($\frac{1}{2}$) the floor using a scrubbing brush ($\frac{1}{2}$) and hot soapy Water ($\frac{1}{2}$) with a disinfectant.
- Lower burning twigs to smoke the toilet ($\frac{1}{2}$)
- Rinse ($\frac{1}{2}$) with hot ($\frac{1}{2}$) and then cold ($\frac{1}{2}$) water to remove dirt and soap.
- Dry thoroughly ($\frac{1}{2}$) with a clean floor cloth.
- Ensure there is toilet paper in the latrine.($\frac{1}{2}$)
- Cover the latrine ($\frac{1}{2}$)

1 6 x $\frac{1}{2}$ = 8 marks

SECTION C 40 MARKS

22. a) Mention three general points to consider when storing clothes (3 marks)

- *The clothes should be well prepared and grouped for storage*
- *Do not overload the drawers with clothes as they may be difficult to close and open*
- *Store woollen clothes with moth balls*
- *Hang/ fold clothes neatly*
- *Store clothes that are not to be worn openly in polythene bags*

b) Explain four dangers posed by living in a poorly ventilated room (8 marks)

- *Suffocation and fainting – When people stay in crowded rooms use up all fresh air causing suffocation, fainting or death*
- *Drowsiness – This results from presence of too much humidity in the air or insufficient oxygen to breath*
- *Discomfort – Excessive humidity feels stuffy and uncomfortable*
- *Easy transmission of communicable diseases – Communicable bacteria and viruses can easily be passed from one person to another.*

c) Explain five factors that have led to increase use of convenience foods in Kenya today (5 marks)

- *There is increasingly more women going to work and therefore having less time to prepare family meals*
- *Major advances in the sector of food technology and processing resulting in quality food products.*
- *Increased ownership of deep freezers and refrigerators which are necessary in the storage of convenience foods*
- *Households are spending more of their leisure time on hobbies rather than on food preparation and cooking food*
- *Advertising and marketing have had a major impact on people's food habits*
- *Improved transportation enabling food to reach many destinations safely and efficiently*

d) State four advantages of planning meals for the family. (4 marks)

- *It enables one to provide balanced meal to meet the dietary requirements of all the family members.*

- *It enables food to be presented attractively to stimulate appetite and enjoyment*
- *It enables adequate food to be prepared to satisfy each member*
- *It enables to meet individual preferences*
- *It enables ingredients to be bought in bulk thus saving cost*

23. a) State four points that marks a well-constructed furniture (4 marks)

- *Should be strongly constructed so as to last long.*
- *Firmly and neatly joined*
- *Well finished*
- *Have drawers and doors that open and close easily (for those with drawers and doors)*
- *Be well balanced to avoid tipping over or wobbling*
- *Be easy to repair or replace when necessary*
- *Be easy to clean and maintain*

b) Explain three different ways of providing family shelter (6 marks)

- *Renting – this is where one lives in an already built house belonging to a landlord at a monthly fee (rent).*
- *Buying – This is buying an already built house either by cash or mortgage.*
- *Building – This is building own house either on bought or inherited land.*
- *Living in an employer's house – In this an employer provides living quarters for employees.*

*(well explained 3*2=6)*

c) Explain four points to consider when sorting out clothes during laundry (8 marks)

- *The use/ purpose of garment- Kitchen items should be laundered separately from personal clothes*
- *Colour - White clothes should be separated from coloured garments to avoid transfer of colour*
- *Degree of soiling - Heavily soiled clothes are separated from lightly soiled clothes*
- *Age - Babies clothes are separated from adults clothes to avoid transfer of infections*

- *Type of fabric - We place clothes of the same fabrics together so that they are accorded same laundry processes*
- *State of health - Sick person clothes is washed separately from the healthy to avoid transfer of infection.*

d) State four ways in which bilharzia can be prevented (2 marks)

- *Proper disposal of faeces and urine away from water sources*
- *Treating drinking water*
- *Not bathing , swimming in infested water*
- *Wearing protective gears such as gumboots for those working in rice growing fields*
- *Draining stagnant water*

24. a) Explain three qualities of a container for storing food in the refrigerator

(6 marks)

- *Should be made of rust proof material to avoid rusting since in the refrigerator there is high humidity*
- *Should have a well-fitting lid/cover to protect food from transfer of flavours*
- *Should be easy to clean to observe food hygiene*
- *Should made of material that do not impact flavour/ smell into the food*
- *Should made of material that is not affected by the low temperature*

b) Explain three factors that affect normal foetal development (6 marks)

- *Sexually Transmitted Infections (STIs) such as gonorrhoea and syphilis. Whereas both diseases are dangerous, gonorrhoea can be passed from mother to the baby during childbirth and handling with contaminated hands, especially the eyes and the private parts. If it is passed on and the eyes are not treated, it might lead to blindness.*
- *HIV/AIDS may cause the baby to suffer from full-blown AIDS and die before the fifth birthday.*
- *Alcohol and smoking may cause the baby to be underweight during birth.*
- *Drugs have the same effect as alcohol and smoking. Others, even the prescribed medicines, can lead to miscarriage. Therefore, it is important to consult a doctor for all medications.*

- *Trauma is any unpleasant experience that causes distress or anxiety. For an expectant mother, it can cause miscarriage.*
- *German measles may deform the foetus if it occurs during the first three months of pregnancy.*
- *Nutrient deficiency may cause the baby to be mentally and physically retarded*

c) State five general rules to observe when making flour mixtures (5 marks)

- *Use good quality ingredients.*
- *Weigh ingredients accurately.*
- *Use correct equipment and utensils during preparation and cooking.*
- *Follow the method of preparation accurately as given in the recipe.*
- *Observe cooking temperatures and duration of cooking as specified.*
- *Baked items should be tested for readiness before taking out of the oven.*
- *Cool and store/serve appropriately.*

d) Mention six symptoms that may call for the attention of a doctor when caring for the sick at home (3 marks)

- *Difficulties in breathing*
- *Unconsciousness*
- *Coughing up blood or vomiting*
- *Inability to urinate*
- *Inability to take fluids for more than a day*
- *Diarrhoea or vomiting lasting for more than a day*
- *Very high fever which lasts more than two days without responding to attempts to bring it down*
- *Blood in the urine or stool*
- *Stiff neck with severe backache*
- *Any prolonged pain in any part of the body*
- *Any sign of deterioration of the prevailing condition*