**HOME SCIENCE**

**441/1**

**PAPER 1 (THEORY)**

**TIME: 2 ½ Hours**



**CEKENAS END OF TERM TWO EXAM-2022**

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

***FORM FOUR END OF TERM TWO EVALUATION EXAM***

**Marking scheme**

**SECTION A (40 MARKS) COMPULSORY**

1. State advantages of using wood panels as well covering (3mks)

* **They are durable**
* **They are attractive due to natural wood grain and colours**
* **They can be given an easy care finish**
* **They add warmth to the room**

1. Give two reasons for smoking a latrine (2mks)

* **To kill flies and maggots**
* **To reduce bad smell**

1. Name two type of flour made from wheat (2mks)

* **Whole meal flour**
* **White / plain flour**
* **Germ flour**
* **Self-raising flour**
* **Starch reduced flour**

1. Give two reason for preheating an oven to the correct temperature before putting the food item in the oven (2mks)

* **To ensure baking at the right temperature**
* **To facilitate correct timing required for baking**
* **To obtain even rising and cooking**

1. Name any four soft furnishings used in the toilet (2mks)

* **Tissue holders**
* **Curtain**
* **Toilet covers/ cistern covers**

1. What is the role of VCT in safe parenthood (2mks)

* **Parents know their status so as to take care of themselves**
* **In case a mother is HIV positive she is given the ARV’s to prevent transmission to the child**
* **ARV’s are administered on child during delivery to prevent transmission**

7.) Define the term kitchen hygiene (1mk)

* **This is cleanliness of surfaces and equipment in the kitchen and proper disposal of reuse**

8. State classification of kitchen equipment and give two example in each case (3mks)

* **Small e.g. spoon, knives**
* **Large e.g. cooker refrigerator**
* **Time and labour saving e.g. micro wave blender**

9. Give the principle used in bottling of fruit juices (2mks)

* **Heating to kill micro-organism**
* **Removing of air to prevent development of bacteria**

10. Highlight two uses of a colander as a kitchen equipment (2mks)

* **To drain food**
* **Steaming food**

11. Name four types of fuel used when ironing clothes (1mk)

* **Electricity**
* **Gas**
* **Kerosene**
* **charcoal**

12. Why is synthetic filament commonly used to make brushes for scrubbing the toilet (2mks)

* **Do not absorb odor**
* **They dry quickly**
* **They are strong and resilient**

13. State three ways of minimizing wastage of detergent during washing (3mks)

* **Use sufficient amount of water for the washing**
* **Use just enough detergent**
* **Start with less soiled clothes**
* **Avoid leaving bar soap in the water during washing**

14. Give other names of the following nutrients (2mks)

Vitamin E – **tocopherols ( ½ )**

Vitamin B2 - **Riboflavin ( ½)**

Vitamin B12 – **Cyanocobalamin ( ½ )**

Vitamin C **– Ascorbic acid ( ½ )**

15. List two permanent stiches used to neaten open seam (2mks)

* **Overlock**
* **Zigzag**

16. Give two qualities of baby bed (2mks)

* **Be kept off the ground floor so that it does not become damp**
* **Have bars that are close together to ensure the baby’s head is not caught in between the bars and the baby cannot fall off .**
* **Be protected from insects and small animal**
* **Strongly joined and firm**

17. Name three ways in which ignorance may lead to malnutrition (3mks)

* **Wrong combinations resulting from ignorance on nutrients found in different food**
* **Loss of nutrient during food preparation, cooking and storage due to poor handling**
* **People ;selling foods to buy less nutritive foods for example selling eggs and milk to bread**

18. Define the term feil as used in seams (1mk)

* **Enclosed raw edges through making / working of a seam e.g. in French in seam**

19. State two characteristics expected of a first Aider (2mks)

* **Be calm when handling causality**
* **Be able to calm the causality**
* **Be quick to make decision on the best way to help**

**SECTION B ( 20 MARKS ) COMPULSORY**

20. Analyse how to carry out the following activities at home during the holidays.

1. Describe how to clean your school synthetic bag (10mks)

* **Collect all ½  the equipment and material needed. Remove items ½  remove loose dirt ½ by wiping with a dry ½ cloth½ /shaking**
* **Clean½ using a cloth½ / sponge wrung from warm ½ soapy½ water and clean both inside½ and out side½**
* **Rinse½ using clean warm½ water**
* **Finally rinse½ the bag cold½ water to freshen**
* **Drip dry½ from the wrong side½ outside under shade½ with opening½ facing downwards½ and well secured½ store approximately½**

1. Describe how you will arrange flowers during your birthday party (10mks)

* **Collect equipment½ and materials**
* **Cut fresh½ flowers**
* **Protect the½ working surface**
* **Trim½ to remove leaves**
* **Cut slanting½ the stem with a sharp knife½**
* **Place a wire mesh½ in the vase**
* **Arrange½ flowers in the vase½ appropriately½**
* **Start½ with the tallest½ followed by the shorter½**
* **Add water½ then check½ for suitable arrangement½**
* **Avoid overcrowding½**
* **Trim½ to adjust½**
* **Clear the working area ½**
* **Clean the equipment ½ and store**

**SECTION C**

**21. Answer any two questions from this section**

1. State four signs of a child suffering from Kwashiorkor (4mks)

* **Oedema/ swelling of stomach face, hands and feet**
* **The child is dull and inactive**
* **Skin is pale**
* **Hair is scanty, silky, brown and thin**
* **Child becomes anaemic**

1. Explain four points to consider when buying a washing machine (8mks)

* **Buy the best quality out of the money one has / cost to be within the financial means of the buyers**
* **Should made of the rust proof material not to stain clothes**
* **Buy from reputable dealer able provide services and spare parts when need arise**
* **Adequate space for storage and operating in**
* **Size .should correspond to the washing**
* **Easy to operate so to be simple**

1. Explain how the following measurements are taken in a garment construction (3mks)

* **Hips : Is taken around the fullest part of the hips, located 15 to 18 cm below the waistline**
* **Waist : It’s taken around the natural waistline**
* **Bust : Is taken around the fullest part of the burst with addition of 2.5 – 3.5 cm for ease**

1. State 5 reasons that has made convenience foods quite popular today in the market (5mks)

* **Some convenience foods are cheap and therefore affordable**
* **The increased availability and accessibility of convenience foods**
* **Ignorance by consumers on nutritional value of food**
* **Change of lifestyle where consumer are moving from traditional lifestyle to western kind life**
* **Due to increased technology variety of foods are available and produced**
* **Consumer are too busy with life to concentrate of food preparation**
* **Inadequate time to prepare and cook food / busy schedules**

**22. (a)** State four ways of coping with inflation in today’s society (4mks)

* **Buying food in season**
* **Using cheaper substitutes**
* **Doing comparative shopping**
* **Priorities needs / buy necessities only**
* **Look for other ways of generating income / engage in income generating activates**

(b) Explain four precautions to take when handling yeast mixtures (8mks)

* **Avoid adding too much fat it sows yeast action**
* **Weigh sugar accurately, too much sugar retards yeast action**
* **Do not prolong proving periods too much acid and fermentation will occur making the product to have unpleasant taste**
* **Allow adequate proving time to prevent poor rising**
* **Knead the dough thoroughly to distribute yeast cells evenly**
* **The liquid should be Luke warm, hot liquid will kill the yeast and cold liquid will slow down the yeast action**
* **Do not add salt directly to the yeast, it will kill it**

(c) State 6 roles of a swing needle machine apart from straight stitch (6mks)

* **Making buttonholes**
* **Attaching buttons**
* **Embroidery**
* **Blind hemming**
* **Finishing edges e,g. Overlock**
* **Darning**
* **Piping**
* **Ruffling**

(d) State 2 qualities to look for when buying a toy for a six month old baby (2mks)

* **Firmly constructed for the child not to dismantle**
* **Not poisonous/ painted not to harm the child**
* **Big in size for the child not to swallow**
* **Smooth to avoid hurting the child**
* **Does not break easily or chip**
* **Appropriate in weight for comfort**
* **Should be easy to clean**
* **A should be attractive**

23. (a) State five determines of safe parenthood (5mks)

* **Meeting the nutritional needs of the mother**
* **Social preparation of the expectant mother**
* **Psychological preparation of the expectant mother**
* **Voluntary counselling and testing of HIV of the parent**
* **Correct age**

(b) Differentiate between persuasive and competitive advertisement (4mks)

* **Persuasive the advertisement seeks the product is better than similar brands by outlining qualities of a product in order to conceive the product is of high quality**
* **Competitive is beyond persuading where the advertiser is promoting a [product against a similar one by outlining the weakness of the competitors brand**

(c) Explain four methods used in flour mixtures to introduce the raising agents (8mks)

* **Mechanical Methods : Air is introduced in the flour mixtures through sieving, rubbing and creaming**
* **Physical Methods: The water in the mixture reaches boiling point, it produces steams which forces its way up the mixture making the food set and raise**
* **Chemical Methods : Chemicals e.g. baking powder when introduced to the flour mixture carbon (iv) oxide is produced raising the dough**
* **Biological Methods : When yeast is kept under favorable conditions in the flour mixture it produced carbon (iv) oxide through fermentation process**

(d) State 6 possible causes of a machine needle breaking during stitching (3mks)

* **Machining over pins**
* **Needle is bent**
* **Machinery close to zip teeth**
* **Needle too fine for the work**
* **Fabric too thick for the needle**
* **Straight stitch foot used for zigzag stitching**
* **When the presser foot is loose and the needle hits it**
* **Needle not firmly fixed in place**