

BASIC DESIGN & TECHNOLOGY **(HOME ECONOMICS)**

1. **GENERAL COMMENTS**

The standard of the paper compared favourably with that of last year. The questions were clear and straightforward. The paper was within candidates' scope. Some of the questions tested candidates' reasoning power which was good. The sewing aspect of the paper has continued to be a problem for most candidates. Candidates' performance this year showed an improvement over that of last year.

2. **DETAILED COMMENTS**

Question 1 (a) **State three characteristics of a good plain seam.**

Majority of candidates were able to answer the question, but their answers were limited e.g. it should be suitable for the type of fabric/garment, should be neat, it is strong and seam should be straight.

Few candidates stated the method for making a plain seam, while others too wrote names of seams, e.g. french seam, overlaid seam.

Few candidates stated in their answers that 'it makes the seam strong; it makes the seam flat' meaning that the characteristic makes the seam either strong or flat.

Other correct Answers

- * It should be pressed open/flat.
- * It should be firmly stitched.
- * Seam allowance should be even.

(b) **State three causes of food spoilage.**

Most candidates did answer it well. Some candidates gave micro-organism and their examples e.g. - (i) micro-organisms (ii) yeast (iii) moulds, (iv) bacteria.

This showed that either they could not differentiate between these or did not understand that part of the topic well. Majority of candidates knew about the enzyme action and oxidation apart from the micro-organisms and their examples.

Few candidates remembered the weevils, bugs, worm, fruit flies and moths/(insects). Some candidates also gave answers such as

‘heat the food’, ‘do not put your hand in the food and, ‘cook/heat food properly.

Causes of Food Spoilage

- * Micro-organisms e.g. yeast, moulds, bacteria, fungi.
- * Oxidation/mechanical damage/cuts.
- * Insect damage e.g. ants, fruit flies, bugs, weevils
- * Worms.

(c) **Complete the table below by filling in the blank spaces**

| Colour | Association in Nature | Symbolism |
|-------------|-----------------------|-----------|
| Example Red | Blood | Danger |
| | Sky | |
| White | | |
| | | Decay |
| | Past History | Mourning |

- * Majority of the candidates understood the question and gave correct answers which were not varied for the association in nature and symbolisms e.g. for sky which is blue the symbolisms were love, royalty, calm, peace. White - Association in Nature, egg shell, cotton, snow. Symbolisms - joy/happiness, victory. Brown for decay and association in nature - soil land/earth.
- * The few candidates who could not reason to select the correct answers put in their own colours, association in nature and symbolism.

(d) **The**

| Colour | Association in Nature | Symbolism |
|---------------|--|---|
| Blue | Sky | Early dawn, female tenderness, serene appearance, rule of a queen |
| White | Ice, white clay/kaolin | Purity, virginity, faultlessness |
| Brown | Dried leaves, bark of tree, rotten object. | Decay |
| Black | Past History | Mourning |

Headmaster of your school has asked you to design and construct a Kumasi Ventilated Impromement Pit (KVIP)

(i) **List three building materials you will use in making the structure.**

- * Majority of candidates had the question right even though the answers were not varied e.g. cement, sand, water.
- * Few candidates were confused and could not differentiate between the materials and tools, therefore, either gave answers for tools e.g. shovel, spirit level or mixed the tools with the materials in their answers.

Some correct Answers for the Question

- * Float - Gauge box - Gauge rod - Builder's square.
- * Tape measure - Line and pin.
- * Straight edge - Brick hammer.

Question 2

(a) **Give two reasons for taking body measurements of a customer before making up his/her garments.**

- * Majority of candidates who answered this question had it right, but were limited in their answers e.g. 'To cut and sew accurately.' 'For the garment to fit well.' 'To avoid wasting fabric/garment.'
- * Few candidates gave answers like 'To make the wearer beautiful.' 'To make the garment look good.' 'To know the shape of the garment.'

Some Answers:

- * To determine correct yardage.
- * Saves time and energy.
- * For the garment to hang properly.
- * To know the person's size.

(b) **What three steps will you take to ensure that accurate body measurement are taken?**

- * Very few candidates were able to answer this.

(c) **List eight body measurements needed for making a school shirt.**

- * This question was not well answered
- * Candidates were only able to get the measurement for the hips, waist, and bust/chest right.
- * Some also gave answers like length, sleeve, neckline, arm, back, front.

Some Correct Answers

- * Across back, Across chest, Sleeve length.
- * Around arm/sleeve width, Shirt length.
- * Shoulder length, Neckline depth, Neckline width.

(d) **Identify three factors that will determine the amount of fabric needed to make a school shirt using a plain polyester fabric.**

- * Most of the candidates who answered this question were able to get either 'the size of the wearer or 'the style of the shirt' right, but not the width of the fabric.
- * Few candidates had two answers right.
- * Candidates who could not get the answers correct, wrote 'Check the quality/texture of fabric.' 'Check if the fabric has designs.'

The factors are:

- * The style of the shirt/garment.
- * The width of the fabric.
- * The size of the wearer/The body measurement of the wearer.

(e) **List two garments that a JHS boy or girl puts on everyday to school.**

- * This was an interesting, simple question that confused some candidates. They included accessories like school bag, pair of socks, shoes, as part of the garment.

Question 3 (a) **State two basic stitches used in crocheting.**

- * The question was very poorly answered.
- * Very few candidates were able to give correct answers.
- * Most candidates listed different decorative stitches e.g. satin stitches, loop stitches, laisy-daisy stitches, stem stitches.

Basic Stitches used in Crocheting

Chain stitches, Double crocheting, Double treble stitches, Slip stitches and Treble stitches.

(b) **List four crocheted articles.**

- * A well answered question. Candidates listed chair backs, bootees, placemats, bags, shoes, belts and hair nets.
- * Some candidates listed chain instead of necklace thus making the answer wrong.

Some Crocheted Articles

Table runners, bonnets, blouses, jacket, muffler, shawl, necklace, berret, swim wear etc.

(c) **Explain four ways by which a caterer can maintain good health and clean environment.**

- * Most candidates were able to list the points without any explanation. e.g.
 - The caterer should weed around surrounding.
 - The caterer should exercise her body regularly.
 - The caterer should wear clean clothes.

Some correct Answers

- * Wearing clean clothes in order to prevent food contamination/to attract customers.

- * Covering food to avoid food contamination.
- * Keeping surroundings clean to prevent rodents, flies, other insects and micro-organisms.
- * Washing of utensils, tools and equipment during and after cooking to prevent contamination of food.
- * Bath twice a day to prevent bad odour on the body in order to attract customers.
- * Frequent medical check-ups for good health to prevent contamination of food by carriers of diseases.
- * Keep clean and short finger nails to prevent germs dislodging into the food.

(d) **Give three reasons why a caterer should stay healthy.**

- * Very poorly answered question.
- * Most candidates wrote 'To avoid sickness.' 'To make food attractive.' 'To kill germs' 'For caterer to get money' 'For the caterer to be healthy.'

Answers

- * To promote self-respect.
- * To promote the catering business.
- * To prevent contamination of food.

(e) **Which four points would Evelyn look out for when buying canned/tinned foods**

A well answered question.

Some answers given by candidates are:

- | | |
|---|------------------------------------|
| * Check expiry date. | * Can should be free from rust. |
| * Check leakage. | * Check the country of production. |
| * Check bloatedness. | * Check ingredients used. |
| * Check content. | * The label should be clear. |
| * Few candidates wrote, check for 'holes' instead of leakage. | |
| * Some candidates gave one word answers like 'rustiness/rust' - labels, bloatedness, leakage, origin. | |

Some other Answers

- * Check for dent
- * Check if it has not been misbranded.
- * Can should not be bloated.
- * Check the nutritional value.
- * Instructions should be in a readable language.

Question 4 (a) **Explain the term food.**

- * A very popular question, yet most candidates could not explain it well. Very few candidates had a full answer.
- * Some candidates wrote 'Food is any liquid or solid which when taken into the body provides energy.'
- * Food is any liquid or solid which when taken into the body provides nutrient/one or more nutrients.
- * 'Food is any edible substance we eat for energy and promotes growth.'

Answer

Food is anything liquid or solid which when taken into the body provides heat and energy, promotes growth, protects and regulates body processes.

(b) Explain the term food spoilage

- * Most candidates were able to answer the question, but they used the term 'process' instead of 'a state'

Answer

It is a state in which food has gone bad and is usually dangerous to eat/It is a state in which food has become contaminated and, therefore, not good for human consumption.

(c) Which method of cooking is best used in the preparation of the following?

- * Fruits;
- * Cake;
- * Khebab;
- * Doughnuts;
- * Yakeyake;
- * Pancake;
- * Rice.

Another poorly answered question by most candidates.

For fruits some candidates wrote jam making/boiling/eating raw.

- * Cake - frying/grilling Khebab - roasting/frying.
- * Doughnuts - boiling/steaming/roasting. Yakeyake - boiling.
- * Pancake - baking.

Other candidates had cake, khebab, doughnuts and rice right.

The best methods for the dishes are:

- * fruits - stewing
- * cake - baking.

- * kebab - grilling.
- * doughnuts - frying.
- * yakeyake - steaming.
- * pancake - frying.
- * rice - boiling.

(d) **Complete the table below.**

| Functional Group | Four Examples Each | Two Nutrients Each |
|-------------------------|---------------------------|---------------------------|
| (i) | | Protein |
| (ii) | Yam, Oats | |
| (iii) Protective | | |
| | | |

- * Most candidates were able to complete the table in the correct order.
- * Very few candidates mixed up the functional groups.

(e) **List two good table manners that you should observe when eating.**

- * Majority of candidates were able to answer the question but their answers were not varied. e.g.
- * Do not talk with mouth full of food.
- * Do not gulp liquid/beverage, sip.
- * Do not make noise with cutlery.
- * Eat slowly and gently.
- * Be on time for meals.