

BASIC DESIGN TECHNOLOGY

VISUAL ART

1. **GENERAL COMMENTS**

The standard of the paper compares favourably with that of the previous years. The questions were drawn from the prescribed syllabus. Unfortunately most candidates whose scripts were wrongly collated performed badly because they could not locate part of Question 1 and the whole of Question 2. The pages in the faulty scripts were collated as follows: Page 1, 2, 11, 12, 13, 14, 7, 8, 9, 10, 3, 4, 5, 6, 15, 16. After answering Question 1a and b(i) on page 2, they were confronted with question Question 6(d) and Question 7 on page 11 and this is a different section all together.

2. **A SUMMARY OF CANDIDATES' WEAKNESSES**

The following are some weaknesses identified in candidates' work:

- (1) Most teachers are still teaching only some aspects of the integrated subjects therefore candidates could not answer all aspect of the subject.
- (2) Some topics were not taught that made it difficult for candidates to answer questions set on them.. For example, weaving and stitching is still taught as basketry therefore the fabric construction and leatherwork aspects are neglected.
- (3) Some candidates still spend valuable time to answer more than the stipulated number of questions instead of doing painstaking work in their specific chosen area of steady.
- (4) Some candidates could not define terms like origam, calligraphy, thonging, fitching, pairing, etc.
- (5) Some candidates demonstrated their inability at illustrating processes like pairing, fitching, thonging, etc.

3. **A SUMMARY OF CANDIDATES' STRENGTHS**

The following are some strengths identified:

- (1) Few candidates could enlarge the given drawing using the grid and they shaded well to achieve solidity and three dimensional quality.
- (2) Some candidates were able to use their initials to develop logos and they showed signs of creativity and maturity.
- (3) Most candidates demonstrated their skill at filling in blank spaces with appropriate word to describe processes and techniques.
- (4) Some candidates whose scripts were well collated performed to a slightly higher standard.

4. **SUGGESTED REMEDIES**

The sections within the Basic Design Technology Visual Art should be taught as integrated subjects. There should be intensive in-service training programs organised to equip teachers to teach the subject well. Also the Visual Art curriculum in the Colleges of Education should be revised so that the teachers who come out of the colleges will be able to cope with the teaching of BDT Visual Art.

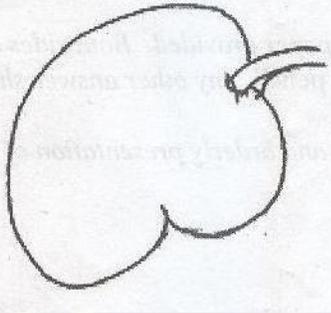
5. **DETAILED COMMENTS**
SECTION A
QUESTION 1

(a) Ama ate fried fish, kenkey and fresh pepper sauce. Classify what Ama ate into the functional groups of food.

- | | |
|--------------------|-----------------------------------|
| (i) Fried fish | - Body building |
| (ii) Kenkey | - Energy giving |
| (iii) Pepper sauce | - Protective/Protector/Protection |

Most candidates performed well. They were able to determine the correct food group of the foods given. Those who performed badly did not know the difference between food groups and food nutrients. They listed proteins, carbohydrates, vitamins, etc as their answers.

(b) (i) The diagram below is the drawing of a mango



Enlarge the drawing in (b) in the box provided below.

- (ii) Shade your drawing in (b)(i) in three tones.
(iii) List two other methods of shading apart from the one you have used in (b)(i).

Stippling, smudging (mass) Hatching, Cross Hatching.

Almost all candidates attempted this question. They produced the drawing. Some were a good representation of the image given and others were not. Only a small number of candidates drew the grid which is the usual procedure for enlarging a drawing. Though shading was generally poorly done, a few candidates could shade in three tones to give their drawing solidity.

- (iii) Most candidates were not familiar with the different techniques of shading.

(b) (i) State two reasons why investigations are carried out in the design process.
To bring out needed information about:

- Available designs
- Tools and materials
- Skills and techniques

Most candidates were able to identify only one reason. Some had idea about the design process. They explained the word investigation out of context.

- (ii) **List three electrical appliances used in the home.
Radio, Television, Blender, Kettle, Microwave oven, Pressing iron, etc.]**

A large number of candidates listed all three appliances. Some listed two and others got one correct. Some did not know the difference between gas and electrically operated appliance.

QUESTION 2

- (a) **State two uses of each of the following:**
- (i) **Logo - Identification of a company, products, letterheads.**
 - (ii) **Poster - Advertisement, Education, Information**
 - (iii) **Cartoons - Social comment, Education, Entertainment**
 - (iv) **Illustration - Drawing to explain a text in a book. Picture to make a subject more meaningful or pleasing.**
 - (v) **Preliminary Sketches - A plan for executing a work. A guide for making a work. To give insight into a finished work.**

Most candidates were familiar with the terms Logo, Poster, Cartoons. They were however not able to state the uses of illustration and preliminary sketches. It appears some candidates misread the question since they answered by defining the terms instead.

- (b) (i) **Use your initials to design a Logo in the box provided below.**
 (ii) **State one difference between or Logo and a trade mark.**

Logo identifies a company/an organisation but a trade mark identifies a product.

Some candidates used their initials and produced interesting works. Others did not know what initials are, they used the Logo of popular companies like M.T.N., TV 3, Viasat 1, Coca Cola, NIKE, etc in their designs. Also most candidates did not know the difference between Logo and trademark.

- (c) (i) **What is calligraphy?**
- Skillful Penmanship/Handwriting
 - The art of beautiful handwriting

(ii) Draw the capital 'H' in the boxes provided below using the following type faces: BLOCK, ROMAN, FREESTYLE, ITALICS.

(iii) List four elements of design.

• Dot, • Line, • Shape, • Texture, • Colour, • Form, • Space

(i) Candidates performed poorly. It appears they have no idea what calligraphy is.

(ii) Most candidates were able to construct the letter 'H' in block and Roman typeface. They however, found it difficult to render same in freestyle and italics.

(iii) Most candidates performed well by listing all four elements. However, some candidates still confuse elements with principles of design. They listed four principles of design. It is also surprising that some candidates listed 'Volume' as an element.

SECTION B

PART I

WEAVING AND STITCHING

QUESTION 3

(a) (i) What is weaving?

It is the interlacing of yarns/strands of fibre, etc to form an article.

(ii) What is stitching?

A joining process by using needle and thread.

Question 3 was a more popular question. Most candidates were able to define weaving as well as stitching. Other candidates had the idea but found it difficult to express themselves well.

(b) (i) In the box provided below, illustrate 'pairing'.

(ii) Write down four steps involved in the preparation of the palm branch into weavers.

- cutting
- pruning (removal of leaves)
- splitting
- peeling/cutting into sizes
- smoothing

It seems 'pairing' is a strange word to most candidates. They were unable to illustrate weaving with two weavers, some candidates attempted the question by making doodles/scribbles in the boxes.

(c) (i) What is fitting? It is an open or loose weaving technique.

(ii) State one use of fitting.

(iii) Write down one weave used at each of the following stages of weaving a basket.

- The base: Randing, Pairing
- The side: Randing, Pairing, Plaiting, Slowing, Waling
- The edge: Wrapping, Binding, Braiding

Some candidates were able to list some of the steps the question demanded. 'Fitching' was strange to them. They could neither define on determine when or where it is used in basketry. They could also not determine the type of weave suitable for the base, side or the edge of a basket.

- (d) (i) **List two tools and two materials used in weaving and stitching of items.**
Tools - needle, knife, bodkin, cutlass, plier, scraper, hammer.
Materials - paper, yarn, plastics, bambo, palm leaves/branches, wire, etc.

Candidates generally performed well. The problem here was whether the item is a tool of material. To some candidates, grouping of the item was the difficulty.

QUESTION 4

- (a) **Give two reasons why the subject weaving and stitching is studied as a vocation.**
- **It leads to occupations which provide jobs.**
 - **It solves unemployment problems.**
 - **Develops creative abilities and skills/products.**
 - **Develops critical thinking and problem-solving skills.**
 - **Helps to promote culture.**

Fewer candidates attempted this question but they performed well.

- (b) **Identify four skills used in basketry.**
- (i) **Weaving, joining, randing**
 - (ii) **Coiling, twining, pairing**
 - (iii) **Plaiting, shaping**
 - (iv) **Framing, knotting.**

Candidates generally performed badly. It appears their skills in basketry processes/techniques is very limited.

- (c) **Identify the parts labelled in Fig. 1**
- | | |
|---------------------------|----------------------------|
| (i) Needle | (ii) Bundled cords |
| (iii) Stitched mat | (iv) Raffia/wrapper |

Most candidates could identify and label only two parts. It appears they are not familiar with the process the diagram represents.

- (v) **State the process used in binding cords for coiling and stitching in fig. 1.**
- **wrapping**

- (vi) List two articles made from the process used in fig. 1.
- doormat, place mat, bags, hats, baskets, drip mats
- (vii) Which region in Ghana is best known for the production of coiled mats?
- Upper East
- (d) State one characteristics and one of each of the materials for weaving and Stitching listed below.
- Bark of plantain
 - Leather
 - Corn husk
 - Raffia palm
- (e)(i-ii) What is tanning?
The processing of hides and skins of animals into leather.
- Three pre-tanning processes are
- Liming, deliming, flaying, dehairing, curing, washing, fleshing, etc.

Candidates generally performed badly.

PART II
MODELING, CASTING AND CARVING

QUESTION 5

- (i) What is modelling?
- An additive forming process using pliable or soft material, e.g clay
- (ii) Give two reasons why clay is mostly used for modelling.
- It is easily available.
- It is soft and pliable
- It can easily be manipulated, i.e it can be cut, pulled, pressed, twisted.
- It is made permanent by firing.
- (iii) In four steps, describe how to prepare clay using the wet method.
- soak
- pound
- remove unwanted materials
- wedge and knead
- (iv) Complete the statement below
- The colour of fired clay is Red or brown

Most candidates were able to define modelling. Others confused modelling with carving. They could not apply the characteristics and properties of clay to answer question 5(a)(ii). Most candidates could describe the preparation process of clay but they could not write down the colour of fired clay.

- (b) (i) **What is paper maché?**
- Pieces of paper soaked, pounded into pulp and mixed with a binder.
- (ii) **In four steps describe how an artist prepares papier maché for modelling**
- Collect and tear paper into pieces
- Soak pieces of paper in a container
- Pound soaked paper into pulp
- Mix with adhesive, e.g cooked starch

Some few candidates did very well by describing two different methods but others had no idea what the question is all about.

QUESTION 6

- (a) **List five tools that are used in the modelling, carving and casting option.**
- (i) **Modelling - Spatula, wire-end tools, cutting wire, knife**
- (ii) **Carving - Adze, cutlass, knife, gouges, scrappers, mallet, chisel**
- (iii) **Casting - Modelling tools, chisel gouges**

Candidates could pick tools from any of the three areas. Though candidates generally performed well in Question 6(a). Some of them just listed tools which have nothing to do with modelling, carving and casting.

- (b) **The following are steps in the process of designing and carving a three-dimensional item in clay. Re-arrange them in the correct order.**

Candidates performed badly. It appears some of them have no idea about the design process. Those who knew the process could not apply the knowledge to answer the question.

- (c) **The passage describes the casting process. Complete the passage by filling each of the blank spaces with the appropriate word chosen from the list of words provided.**

Candidates generally performed badly. They could not understand the passage.

- (d) **Describe one technique used to create sculpture in wood.**
- **Carving: Draw design on wood, cut away the wood bit by bit till the desired form is obtained. Finishing is done by texturing, varnishing, lacquering, polishing, etc. It is a subtractive method.**

Most candidates did not understand the rubrics. They defined carving instead of describing the process.

PART III
CONSTRUCTION AND ASSEMBLAGES

QUESTION 7

- (a) (i) **State two reasons why Construction and Assemblage is important in the society.**
- **It may lead to occupation which will provide jobs.**
 - **May help develop creativity.**
 - **The products may help promote, preserve and transmit culture.**
 - **Develop critical thinking and problem-solving skills.**
 - **Promote recycling and the awareness of the use of waste materials in the environment.**

Candidates generally answered this question well. Most of them were able to give two reasons and others gave one correct reason.

- (ii) **List five items that can be produced by Construction and Assemblage.**
- | | | | |
|---------|--------------|---------------|--------|
| - dolls | - mobiles | - stables | - toys |
| - boxes | - containers | - cages, etc. | |

Candidates performed well generally.

- (b) **In the table below draw and name the tools used for the following techniques:**
- **cutting, securing, drilling**

Tools for 'securing' was a problem for most candidates. They could neither name or draw them.

- (c) (i) **What is Origami?**
- **The art of paper - folding, i.e the art of folding paper into different shapes.**
- (ii) **What is meant by the term recycling?**
- **Converting waste material to reusable form (material) e.g bottles, sheets of paper, plastics are processed for use again.**
- (iii) **List three characteristics of paper**
- **Heavy or light in weight**
 - **Smooth or rough**
 - **Thick or thin**
 - **Does not tear easily**

Candidates had not idea what 'Origami' is. Most of them struggled with the definition of 'recycling'. They could also write down only two characteristics of paper.

QUESTION 8

(a) In the table below, state one use of each of the tools listed.

- **Hacksaw: for cutting metal**
- **Pair of scissors: cutting, trimming**
- **Razor Blade: cutting, sharpening**
- **Pliers: Gripping, pulling, holding, bending**
- **Bodkin: Piercing, making holes, boring, splitting**

Most candidates did not know what pliers are used for.

- (b) (i) Give two uses of paper**
- **For writing/drawing on books, newspaper, currency, magazine, recording information.**
- (ii) What is paper made of?**
- **Paper is composed of fibres pressed into a compact web made from fabric, straw, wood, grasses, etc.**

Candidates were able to give the uses of paper but could not tell what paper is made of.

(c) In the box provided below, draw an open book and indicate the following parts:

- (i) spine;**
- (ii) for edge;**
- (iii) head;**
- (iv) text;**
- (v) front cover.**

Most candidates drew open books but others drew closed books. Candidates generally found it difficult to indicate spine and text.

- (d) Give two reasons for re-binding a book.**
- (i) to restore and preserve torn, soiled or damaged books.**
 - (ii) to restore important documents and reports.**

Most candidates could give only one reason. Their second reason was a repeat of the first one.

(e) Identify five main steps to follow when making a jotter.

Most candidates described the steps for single-section and others used the side-sewing method of binding.

Candidates performed better in Question 8 and it was more popular than Question

PART IV
FABRIC AND LEATHER DECORATION

QUESTION 9

- (a) (i) **What is the main difference between fabric and leather?**
- Fabric is cloth constructed by weaving, knitting, etc yarns while Leather is a natural material obtained by tanning hides and skins of animals.
- (ii) **What is resist dyeing?**
- A method of dyeing fabrics in which certain parts of the fabric are prevented from absorbing the dye, e.g tie-dye, batik
- (iii) **List two synthetic dyes**
- Vat, acid, direct, basic, dylon, jiffy, reactive, indanthrene, potassium permanganate.

Most candidates were able to state the main difference between fabric and leather. They were also able to describe resist dyeing but most of them could only give one synthetic dye. It is surprising that some of them did not understand 'synthetic'. They listed dyes from plant sources.

- (b) **In the table given, different plants have been listed. Fill in the spaces provided for source, process of extraction of the dye and the colour obtained from them.**
- Teak, tea, pear

Most candidates demonstrated their knowledge about teak and tea but had a problem with pear. They do not know what it is.

- (c) **The passage given describes the method of dyeing a fabric using hot water. Complete the passage by filling each of the blank spaces with the appropriate word chosen from the list of words provided below:**
- immerse, water, strain, boil, starch, fabric, solution, bark, salt, wax bath.

Most candidates understood the passage and inserted the words in their right places. However, there were some candidates who could not read the passage and therefore inserted the words anyhow.

QUESTION 10

- (a) (i) **What is a thong?**
- A long, thin strip of leather, plastic or rubber.
- (ii) **List two uses of a thong**
- decoration, braiding, joining pieces of leather, stitching
- (b) **In three steps, draw how to thong the edges of a leather mat in the boxes below.**
- (c) **State one characteristics of each of the following types of leather.**
- (i) **Cowhide** - Thick in the middle, it is smooth or grained.
It can be split into two or more layers.
- (ii) **Sheep skin** - It is light weight, fine - grained and soft.
It is good quality leather.

(iii) Snake skin - Colourful, textured, patterned.

Candidates generally performed poorly. It appears they have not really studied the leather aspect of the subject.

- (e) (i) **Using a leaf motif, draw an all-over pattern to repeat not less than six times in the box provided below.**
- (ii) **Draw suitable textures at the background.**
- (e) **State one use each of the following tools for fabric and leather decoration.**
- (i) **pencil - Drawing, sketching, marking out, designing making patterns, writing,.**
- (ii) **knife - cutting, trimming, piercing.**
- (iii) **bone folder - pressing down after gluing**
- (iv) **revolving punch - making holes, cutting designs, stamping**
- (v) **mallet - hitting/pushing other tools forward to cut or carve,**

Most candidates were able to draw the leaf motif and repeat it in an all-over pattern and to provide textures on the background. Some candidates did not answer the question. They drew their own motifs. Some were flowers, insects or abstract shapes and arranged them anyhow leaving the background bear.