Examination Report

Design and Technology

6902

EGCSE

2025

Table of Content

Code	Subject Name and Component	Page#
6902	Design and Technology P1	3 - 15
6902	Design and Technology P2	16 - 21
6902	Design and Technology P3	22 - 38
6902	Design and Technology P4	39 - 43

PAPER 6902/01

Comments on Specific Questions

Question 1 Introduction

The Design and Technology syllabus consists of four components, namely: Paper 1 (Design Core), Paper 2 (Graphic Products) which is an option, Paper 3 (Resistant Materials) which is an option paper and Paper 4 (Coursework).

Number of centres and candidates from 2021 to 2025: The table below represents statistics of number of centres and candidates that have sat for the Design and Technology external examination for the past five years.

Year	2021	2022	2023	2024	2025
Centres	103	97	103	112	111
Candidates	1340	740	1005	1065	1573

Comment on number of centres:

The statistical data presented in the table above indicates that the number of centres offering Design and Technology increased by eight (8) between 2021 and 2025. There has been a significant increase in the number of centres offering the Design strand of the school curriculum from the year 2022 to 2024, although in 2025 there was a decline by one centre. This statistic reflects that there was a centre that did not register any candidate for the subject although it offers it, this is evident by the fluctuating manner the statistic shows even though there were new schools that introduced Design and Technology.

Comments on number of candidates:

Although the figure in the table above indicates that the number of candidates sitting for Design and Technology has increased in the past years. In 2022 there was a sharp fall. Statistically the number of candidates that had registered for the subject in 2023 was 1 005 which shows an increase of 265 candidates who registered for the subject and that is highly commendable. Again, the number of candidates who registered for 2024 exam increased to 1 092 and those who finally sat for the exam increased to 1 065. The number of candidates sat for the exam in 2025 was 1573 showing an increase of 508 candidates. Attendance registers revealed that some candidates who registered were absent during the examination period.

As noted in previous reports, there are areas in the syllabus that need improvement. Such areas are dimensioning, rendering techniques, line quality, proportions, detailed construction, graphic communication, graphical materials, working with card, card joints, features that attract attention on promotional cards, lettering style, evaluation of ideas, types and usage of mechanisms including mechanical movements.

Key messages

- Full solutions to the design problem in response to part (e), should include constructional details rather than manufacturing methods that might be used in the workshop or design studio.
- Candidates should remember that simple drawings are often better than words when describing manufacturing methods, they are suggesting in response to part (g).
- Graphic Products candidates should manipulate card/graphic materials so that they understand their option very well and be able to answer to the point when doing question 2.
- Graphic Products candidates should be assisted by being given a chance to make prototypes in their Graphic laboratories so that they can answer questions (g) with ease.

General Comments:

Candidates responded as intended to all three optional questions and there was an increase in the number of candidates opting for Questions 1. There was a slight decline in those opting for Question 2 and 3 compared to the previous year. Question 1 was, by far, the most popular choice question for candidates. One thousand five hundred and thirty-seven (1 537) candidates sat for this paper. Of these candidates six hundred ninety-two (692) opted for Question 1, whilst seven hundred and sixty-seven (767) chose Question 2 whilst seventy-eight (78) answered question 3.

Quite a few candidates responded very well to the design question of their choice and very few could not engage fully in the design problems set in the context of kitchen dustbin, general merchandise store's promotional card and the book picking device. Candidates were to show a high level of originality in their design work.

The A3 answer sheets are intended to help candidates follow the required design process and those candidates who responded as required were able to effectively demonstrate their design and thinking skills.

Comments on Specific Questions

Question 1

Design a unit for a kitchen that will store four different types of recyclable materials separately. This was the second most popular question compared to the other two as there were 692 candidates out of 1537 candidates who answered this question. The candidates who attempted this question understood the requirements of the kitchen unit used to store recyclable materials.

(a) Candidates were required to list four additional points about the function of such a unit that you consider to be important.

Comments:

Many candidates were able to list correctly the four additional points about the functions of such a unit that they consider to be important. Some managed to get three correctly, and few candidates who got two marks and none got less than two in this question. Candidates reflected a great improvement in this examination, and it is highly commended.

Expected responses

Four suitable points include;

- Easy to store,
- easy to dispose of waste products.
- easy to clean/ hygienic
- keeps out intolerable smell
- waterproof/moist resistant
- easy to move around
- easy to access
- label compartment
- stable in use
- match kitchen environment
- should not consume more space

Common mistakes

- Very few candidates repeated the given function points instead of adding four additional points as the question required.
- There were responses that had nothing to do with the functions of the kitchen waste unit such as naming the materials to be used to make the unit,
- While some were not justifying their responses, which led them to lose marks as they were not clear.

(b) Candidates were asked to use sketches and write notes to show two places where the unit could be placed in the kitchen.

Comments:

Most candidates were able to sketch two different places where the unit can be placed although some made some mistakes which cost them some marks.

Expected responses:

kitchen corner/ inside cabinets/ drawer/ under sink/ behind door/ wall mounted.

Common mistakes:

- Some candidates were able to sketch the different places without the notes/naming the places.
- Some were giving irrelevant information like constructing joints such as frame mitre joints, table construction joints such as mortise and tenon joints

(c) Candidates were expected to develop and sketch three ideas for the unit.

Comments:

Most candidates were able to develop and sketch the three ideas, showing creativity in their response to the design problem and scored very good marks. Very few came out with less than the required three concepts which were marked on pro-rata basis.

Expected response:

- Sketch three different ideas for maximum marks showing high quality sketches.
- Using wide range of enhancement techniques with colour or other forms of highlighting.
- Clearly represent the materials and material texture.

- With clear annotation and details to provide information on the nature and detail of each design idea.
- Ideas should meet the given design brief and the specifications listed in (a).

Common mistakes:

- Some candidates sketched only one or two ideas.
- Others failed to represent their ideas properly as they were poorly sketched and they lost some marks.
- Others would sketch one or two perfect ideas, and the others would be poorly done, which resulted in loss of marks as the ideas are marked holistically.
- While others failed to enhance their ideas, but they only covered them with coloured pencils.
- Quite a few candidates did not include dimensions/sizes when adding their annotations while others sketched ideas that did not meet the given design brief.
- Others did not show or tell how the ideas parts joined.
- Some showed the 3 ideas storing less than 4 different wastes.
- Other candidates would literally sketch simple drawing and develop it to be more functional but exclude the annotations needed and that made candidates not finishing the paper and got less marks.

(d) Candidates were required to evaluate their ideas and justify why they have chosen one idea to develop it more fully.

Comments:

Majority of candidates were able to evaluate and select their preferred idea they then gave clear justification for their choices.

Expected response:

- Evaluate all three ideas by giving one advantage and one disadvantage for each idea.
- Select the chosen idea and justify why it has been chosen.
- Candidates included comments which showed valid judgments rather than just simple descriptions of each design idea.

Common mistakes:

- Some candidates were writing more than one advantage or disadvantage which made them to run short of them when getting to the next idea.
- Repeating some of the advantages stated in the evaluations led some to lose valuable marks.
- Some candidates used the justification which said they chose a particular idea because it meets all specifications and they lost some marks.
- Some candidates left blanks and did not attempt to answer.

(e) Candidates were to draw a full solution of the chosen idea, including construction details and major dimensions.

Comments:

Candidates were free to use any drawing method to produce a full solution to the given problem if they provided the required constructional details and dimensions, very few used 2D drawings.

Expected response:

- Candidates were expected to draw a high standard of drawing, preferably a 3D or 2D drawing showing a range of techniques that shows clearly all the details of joining the different parts.
- Show at least three overall dimensions and add more additional dimensions that may show thickness, diameter and depths. Also show all constructional details with good annotation and additional drawings as necessary.

Common mistakes

- Very few candidates were able to produce high standards of drawings
- Some candidates did not use a wide range of enhanced techniques.
- Some did not add the constructional details in the form of sketches or in written annotations.
- Some only showed the three overall dimensions with no detail dimensions, in that way they lost valuable marks.

(f) Candidates were to suggest two suitable materials for their solutions and give reasons for their choices.

Comments:

Many candidates selected specific materials for their design presented in the previous section, although some were just naming irrelevant materials to their designs. Very few candidates gave generic responses such as wood/metal/plastic, such responses were not awarded marks.

Expected response:

- Give suitable materials and reasons for the choice.
- Give sound reasons for the choices, that indicates candidate consideration of the structure of his/her design and are familiar with the strengths and weaknesses of the specific materials in context.

Common mistakes:

- Some candidates gave irrelevant materials such as cards which cannot perform the storage task.
- Others gave reasons that did not match the material stated and they lost some marks.

(g) Candidates were to outline a method that could be used to manufacture one part of their solution in a school workshop.

Comments:

This question was poorly answered by most candidates.

Expected response:

- A detailed/step by step description of manufacturing one part including appropriate method and tools used.
- Responses to this part need to include details beyond general marking out and preparation methods done to any product part.
- Other details such as shaping, marking and cutting of joints to the selected part till it is ready to be assembled to the other parts are very much needed, also showing the tools used.
- The use of simple drawings in addition to written text was generally successful.

Common mistakes:

- Majority of candidates did not state the method of manufacture and they lost valuable marks.
- Some stated a joint instead of a method of manufacturing.
- Most candidates gave scanty description of the processes through annotated sketches.

Question 2

Design a promotional card for the general merchandise store which includes features that will attract customers. The card will be distributed to local homes.

This question was the most popular as it was attempted by 767 out of 1537 candidates. It was intended for those who are doing the Graphic Products option. Candidates appeared to be familiar with the requirements of the promotional card.

(a) Candidates were required to list four additional points about the function of such a card that you consider to be important.

Comments:

The majority of candidates were able to list correctly four additional points about the functions of such a card that they consider to be important, and they got all the marks in this question. Some manage to get three marks, very few candidates who got two marks and one in this question.

Expected responses four suitable points include:

- Attract attention/eye catching, colourful
- Show product sold
- invite people to read
- will go through a letter box easily
- create interest/ impact
- product cost
- readable fonts
- directions/ location
- safe to use
- no repeats of question and design brief

Common mistakes

- No understanding of the question as they were generalising the card ignoring key specifications of the functional card.

(b) Candidates were asked to use sketches and notes to show two types of features that could be included on a promotional card to attract attention.

Comments:

Most candidates were able to sketch two different types of features to attract attention, although some lost some marks as they did not understand what they needed to do.

Expected responses:

Two types of features that could be included on a promotional card to attract attention;

- Pop up
- Font size or colour
- Window to open
- Raised or embossed products
- Slider photo of shop
- Shape/ form, movement

Common mistakes:

- some sketched two joints instead of the required features to attract attention.
- Some failed to represent these features in form of drawings, i.e. very poor sketches
- Some add irrelevant notes or wrongly named the features

(c) Candidates were expected to develop and sketch three ideas for the promotional card.

Comments:

Most candidates were able to develop and sketch the three ideas, showing creativity in their response to the design problem and scored very good marks. Very few came out with less than the required three concepts which were marked on pro-rata basis.

Expected response:

- Sketch three different ideas for maximum marks showing high quality sketches.
- Using wide range of enhancement techniques with colour or other forms of highlighting.
- Clearly represent the materials and material texture.
- With clear annotation and details to provide information on the nature and detail of each design idea.
- Ideas should meet the given design brief and the specifications listed in (a).
- Use the different mechanism given in question (b).

Common mistakes:

- Some candidates sketched only one or two ideas.
- Others failed to represent their ideas properly as they were poorly sketched and they lost valuable marks.
- While others failed to enhance their ideas, but they only covered them with colored pencil.
- Quite a few candidates did not include dimensions/sizes when adding their annotations while others sketched ideas that did not meet the given design brief.
- Other candidates sketched general cards which were not related to the question which resulted in loss of marks.
- Some did not show the details/information on the card.

(d) Candidates were required to evaluate their ideas and justify why they have chosen one idea to develop it more fully.

Comments:

Majority of candidates were able to select their preferred idea and gave a clear justification for their choices.

Expected response:

- Evaluate all three ideas by giving **one** advantage and **one** disadvantage on each idea.
- Select the chosen idea and justify why it has been chosen.
- Candidates included comments which showed valid judgments rather than just simple descriptions of each design idea.

Common mistakes:

- Some candidates were writing more than one advantages or disadvantages which made them to run short of them when getting to the next idea.
- Repeating some of the advantages stated on the evaluations led some to lose valuable mark
- Some candidates used the justification which say they chose a particular idea because it meets all specifications and they lost some marks.

(e) Candidates were to draw a full solution of the chosen idea, including construction details and major dimensions.

Comments:

Candidates were at liberty to use any drawing method to produce a full solution to the given problem if they provided the required constructional details and dimensions.

Expected response:

- Candidates were expected to draw a high standard of drawing preferably a 3D drawing showing a range of techniques that shows clearly all the details of joining the different parts.
- Show at least three overall dimensions and add more additional dimensions that may show thicknesses, diameters and depths. Also show all constructional details with good annotation and additional drawings as necessary.

Common mistakes:

- Very few candidates were able to produce high standard of drawings
- Some did not use wide range of enhancing techniques
- Some did not add the constructional details in the form of sketches or in written annotations.
- Some showed the three overall dimensions only with no detail dimensions, in that way they lost valuable marks.

(f) Candidates were to suggest two suitable materials for their solutions and give reasons for their choices.

Comments:

Many candidates appropriately named specific materials for their design presented in the previous question.

Expected response:

- Give suitable materials and reasons for the choice.
- Give sound reasons for the choices, that indicates candidate consideration of the structure of his/her design and are familiar with the strengths and weaknesses of the specific materials in context.

Common mistakes:

- Some candidates gave irrelevant materials such as SAP which cannot be used for a card.
- Others showed little knowledge of the materials used in graphics.

(h) Candidates were to outline a method that could be used to manufacture a prototype of the promotional card and include the names of the equipment used.

Comments:

This question was poorly performed by majority of candidates. Most candidates show that they cannot make the prototype of their product in a school graphics studio.

Expected response:

- A detailed/step by step description of producing the prototype including appropriate method and tools used.
- Responses to this part needed to include details beyond general marking out and preparation methods done to any product but give a clear detail of steps taken from selection of background, draft an outline, decide colour scheme, add some images appropriately balance, and add the message with appropriate font sizes.
- Other details such as printing, shaping, joining making the folding mechanism also showing or stating the tools used.
- The use of simple drawings in addition to written text was generally successful.

Common mistakes:

- Most candidates were only producing one part instead of the whole prototype
- Quite a number of candidates did not state the method of manufacture and they lost valuable mark.
- Some stated a joint instead of a method of manufacture.
- Most candidates gave scanty description of the processes through annotated sketches.

Question 3

Design a device which would help students easily reach books from the top shelves in a school library. The device must include a mechanism.

This was the least popular as only 78 out of 1537 candidates answered this question. In this question candidates were required to use their knowledge and experience of systems and control and the use of mechanisms and electronics in the context.

(a) Candidates were required to list four additional points about the function of such a unit that you consider to be important.

Comments:

The majority of candidates were able to list at least three additional function points of the device correctly instead of the required four. Some manage to get three correctly, very few candidates who got two marks and none got less than two in this question.

Expected responses four suitable points include:

- Adjustable in length
- Easy to operate
- Take different sizes of books
- Lightweight to hold
- Comfortable to hold
- Stable and safe in use
- Easy to store/save space
- Have locking mechanism
- Hold the books securely
- None slippery
- Easy to see items
- Easy to maintain
- Has auto return
- No repeats of design brief

Common mistakes:

- some candidates repeated the given functional points
- some list point for a device one would stand/ climb on top to reach books
- there were responses that had nothing to do with the functions of the device such as the aesthetics of the device
- whilst some were not justifying their responses which led them to lose marks

(b) Candidates were asked to use sketches and notes to show two types of mechanisms that could be used to grip or hold books.

Comments:

Most candidates were able to sketch two different types of mechanisms although some made some mistakes, and they lost some valuable marks.

Expected responses: two of the following mechanisms.

- Screw clamps
- Jaws

- Lever
- Flexible clip
- Scissor grip
- Spring loaded clamps
- Trigger activated claw mechanism

Common mistakes:

- Some candidates were drawing joints instead of the mechanisms.
- Candidates were also drawing bolts and nuts, pivots, stairs, ladders, castor wheels, bookshelves, and stools for climbing.

(c) Candidates were expected to develop and sketch three ideas for the device.

Comments:

Most candidates were able to develop and sketch the three ideas, showing creativity in their response to the design problem and scored very good marks. Very few came out with less than the required three concepts which were marked on pro-rata basis.

Expected response:

- Sketch three different ideas for maximum marks showing high quality sketches.
- Using wide range of enhancement techniques with colour or other forms of highlighting.
- Clearly represent the materials and material texture.
- With clear annotation and details to provide information on the nature and detail of each design idea.
- Ideas should meet the given design brief and the specifications listed in (a).
- Use the different mechanism given in question (b).

Common mistakes:

- Some candidates sketched only one or two ideas.
- Others failed to represent their ideas properly as they were poorly sketched and they lost valuable marks.
- While others failed to enhance their ideas, but they only coloured them.
- Not include dimensions/sizes when adding their annotations while others sketched ideas that did not meet the given design brief.
- Others did not show or tell how the ideas parts joined.
- Some did not show how the 3 ideas are stored.

(d) Candidates were required to evaluate their ideas and justify why they have chosen one idea to develop it more fully.

Comments:

Majority of candidates were able to select their preferred idea and gave a clear justification for their choices.

Expected response:

- Evaluate all three ideas by giving **one** advantage and **one** disadvantage on each idea.
- Select the chosen idea and justify why it has been chosen.
- Candidates included comments which showed valid judgments rather than just simple descriptions of each design idea.

Common mistakes:

- Some candidates were writing more than one advantages or disadvantages which made them to run short of them when getting to the next idea.
- Repeating some of the advantages stated on the evaluations led some to lose valuable mark
- Some candidates used the justification which say they chose a particular idea because it meets all specifications and they lost some marks.

(g) Candidates were to draw a full solution of the chosen idea, including construction details and major dimensions.

Comments:

Candidates were at liberty to use any drawing method to produce a full solution to the given problem as long as they provided the required constructional details and dimensions.

Expected response:

- Candidates were expected to draw a high standard of drawing preferably a 3D drawing showing a range of techniques that shows clearly all the details of joining the different parts.
- Show at least three overall dimensions and add more additional dimensions that may show thicknesses, diameters and depths. Also show all constructional details with good annotation and additional drawings as necessary.

Common mistakes:

- Very few candidates were able to produce high standard of drawings
- Some candidates did not use a wide range of enhanced techniques.
- Some did not add the constructional details in the form of sketches or in written annotations.
- Some only showed the three overall dimensions only with no detail dimensions, in that way they lost valuable marks.

(f) Candidates were to suggest two suitable materials for their solutions and give reasons for their choices.

Comments:

Many candidates selected specific materials for their design presented in the previous section, although some were just naming irrelevant materials to their designs. Very few candidates gave generic responses such as wood/metal/plastic, such responses were not awarded marks.

Expected response:

- Give suitable materials and reasons for the choice.
- Give sound reasons for the choices, that indicates candidate consideration of the structure of his/her design and are familiar with the strengths and weaknesses of the specific materials in context.

Common mistakes:

- Some candidates would state the materials but fail to state the reason.
- Others would state the fittings, and fixings finishes and joints, etc.
- Others gave reasons that did not match the material stated and they lost some marks
- Candidates were repeating the same reasons mentioned on the first point.

(g) Candidates were to outline a method that could be used to manufacture one part of their solution in a school workshop.

Comments:

This question was poorly answered by most candidates.

Expected response:

- A detailed/step by step description of manufacturing **one** part including appropriate method and tools used.
- Responses to this part needed to include details beyond general marking out and preparation methods done to any product part.
- Details such as shaping, marking and cutting of joints to the selected part till it is ready to be assembled to the other parts is very much needed, also showing the tools used.
- The use of simple drawings in addition to written text was generally successful.

Common mistakes:

- Majority of candidates did not state the method of manufacture and they lost valuable marks.
- Some stated a joint instead of a method of manufacture.
- Most candidates gave scanty description of the processes through annotated sketches.
- Some candidates would only mention the tools and sketch them.

PAPER 6902/02

Key messages

- The focus of this assessment is Graphic Products. Candidates benefit from the practical activities based on the questions contained in this paper.

General Comments

In this component, all candidates were required to answer all three questions in Section A (A1, A2, and A3) and then answer either B4 or B5 from Section B. There were 231 candidates who answered question B4 and 584 who answered question B5.

As noted in previous reports, there are areas in the syllabus that educators need to pay special attention to, such areas are proper application of geometric construction, drawing of centre lines, projection lines, and use of the folding lines, correct orientation of drawings in pictorial drawings and the correct method of projection views in orthographic projection.

Comments on Specific Questions Section A

Question A1 compulsory question

Auto Span garage spanner symbol.

Candidates were required to use geometric construction to complete the spanner symbol by drawing:

(a) Missing half regular hexagon

Comments:

Majority candidates had a problem with the construction of the half hexagon and they lost valuable marks

Expected responses:

- Use geometrical construction to draw the missing half hexagon
- Use A/F method.

Common mistakes

- drawing the missing hexagon using set-square and a T-square only.
- Using A/C method.

(b) Missing R20 arc to touch R25 arc and the top edge of the spanner.

Comments:

Very few candidates managed to construct the R20 arc to be tangential to the R25 arc and the edge of the spanner.

Expected responses:

- Draw arc R45 from the centre of the half hexagon to be parallel to the R25 arc of the spanner.
- Construct a 20mm parallel line above the top edge of the spanner to meet the R45 arc then join the R25 centre and the new centre and drop a perpendicular line from the new centre to the top edge of the spanner.
- Draw the R20 arc tangential to the top edge.

Question A2

Second compulsory question.

Auto Span signage.

Candidates were required to complete the signage by:

(a) Adding the missing letters; A, O and S

Comments;

Most candidates were able to print letter A but had some challenges with O and S.

Expected responses:

- Print the letters using same font style
- Correct spacing
- Same height.

Common mistakes:

- Wrong letter O and S font style
- Wrong spacing

(b) Complete the rectangular boarder of the signage.

Comments:

Almost all candidates were able to complete the rectangular boarder of the signage.

Expected response:

- Geometrically construct the rectangle

Common mistakes:

- Not using geometrical construction.

(c) Adding the isosceles triangle arrow head of the signage.

Comments:

Most candidates were able to construct the isosceles triangular arrowhead which made them to obtain the 2 marks.

Expected response:

- Use geometrical construction of the isosceles triangle

Common mistakes:

- Incorrect measurements of the 50mm sides of the triangle
- Constructing an equilateral triangle instead of the isosceles triangle.

Question A3
Last compulsory question.
Auto Span garage truncated hexagonal nut displayed in the reception.
Candidates were required to draw an isometric view of the truncated nut model using scale 1:10.
Comments;

One of the questions which seemed to be the most difficult for majority of the candidates.

Expected responses:

- Correct orientation of the truncated hexagonal prism
- Correct foreground
- Length of 70mm
- Width of 60mm
- Height of 52mm
- 4 correct faces

Common mistakes;

- failing to interpret the orthographic views
- wrong orientation
- incorrect foreground
- wrong measurements
- incorrect prism

Section B - two optional questions

Question B4

This question was from an actual 'Graphic Product' was the least popular as it was attempted by 231 out of the 816 graphics candidates.

(a) Candidates were required to draw a pie chart to show number of vehicles required for maintenance in the Auto Spares in 2022.

Comments:

Most candidates were able to draw the 2D pie chart for the types of vehicles which came for service in 2022.

Expected response:

- draw pie chart circle
- have 5 correct angled divisions
- correctly label the sectors or show correct key
- show quantities.

Common mistakes:

- having six or 4 sectors
- wrong angles
- failing to label sectors
- not showing quantities

(b)(i) Shows the seasonal sales for each vehicle part sold in the garage in 2022

Candidate were required to draw a two-dimensional bar chart to show the sales of brakes over the winter, spring and summer in 2022.

Comments:

Quite a few candidates managed to draw the two-dimensional chart for the sales of brakes over winter, spring and summer.

Expected responses:

- bar chart with 3 seasons correctly referenced
- rise and fall of the three bars (winter to summer)
- correct scale

Common mistakes:

- wrong scale making quantities wrongly placed
- showing of only one season
- showing all the parts instead of brakes only
- bar chart drawn into 3D

(ii) Candidates were asked to draw a three-dimensional bar chart to show the difference in sales of all the three spare parts in the winter and summer of 2022.

Comments:

Most candidates who attempted this question managed to come up with 3D bar chart although some of them were not correct.

Expected response:

- 3D bar chart showing summer and winter parts sale
- Correct value to scale
- Labels added to correct value

Common mistakes:

- Drawing 2D bar chart
- Incorrect values and wrong labels.

Question B5

Car model packaging.

This question was also derived from a real 'Graphic Product' and it was the most popular question as there were only 585 candidates who opted for it.

(a) Candidates were required to draw a one-piece full size net of the car model packaging.

Comments;

Most candidates managed to draw the development of the box and they scored good marks.

Expected response; (net)

- Draw the 6 panels correctly
- Correct overall length of 230mm
- Correct overall width of 170mm
- Correct R14 on side flaps
- Correct tuck-in flap 10mm and correctly angled
- 4 glue taps shown and angled too
- 6 folding lines in addition to the ones started for you.

Common mistakes:

- Having less than 6 panels
- Failing to measure correctly
- Drawing too small glue tabs or without angled corners
- Less than 5 folding lines and not represent them in broken/centre lines

(1/2 elliptical window)

Comments:

Most candidate did very well on the part of the elliptical window and they scored very good marks.

Expected response

- Correct positioning of
- the elliptical window
- Major axis of 50mm
- ½ minor axis of 15mm
- Correct construction of the ellipse using any method but not string. Paste the trammel
- if trammel method was used.

Common mistakes:

- Wrong orientation of the ellipse
- wrong vertical and horizontal lines direction
- Ellipse not following points

(b) Candidates were asked to design a method of locking without the use of glue

Comments:

Most candidates designed methods that are not appropriate

Expected response:

- Appropriate locking method
- Communication/annotation

Common mistakes:

- Non-self-locking method

PAPER 6902/03

Key messages

- Candidates need to read questions very carefully and have a clear understanding of what the question requires of them before attempting an answer.
- For candidates to achieve good marks for Section A, they need to develop a wide knowledge and understanding of materials, tools and processes used when working with wood, metal and plastic.
- Candidates need to improve their communication skills, especially in section B. They must try to provide clear sketches when answering questions that start with the statement: Use sketches and notes to... In addition, notes should enrich and make clearer what has been drawn and not just to simply state the obvious. It is vital that candidates do provide sketches with notes otherwise they deny themselves access to maximum marks.

General Comments

This paper consists of two sections, Section A and Section B. Candidates were required to answer all questions in Section A and then proceed to answer Questions 11, 12 or 13. Most candidates in all centres followed the instructions. Candidates still showed challenges in understanding and execution of basic skills and technique in working with materials. When showing processes using sketches and notes, they should show the correct tools used to carry out the tasks including the holding and supporting tools.

Section A

This section testing knowledge and understanding is concerned with materials, tools and processes used when working with plastic, metal and wood. The syllabus requires that candidates should have an all-round knowledge and understanding of the three content areas named herein to perform well in this Paper.

Comments on Specific Questions

Question 1

Candidates were given two different types of cutting tools. They were required to name the cutting tool A and B

Comments:

This question was not answered very well, majority of candidates committed unexpected mistakes as these were basic tools.

Expected response:

- Tool A - Smoothing plane
- Tool B - Hand file

Common mistakes:

Candidates named the tools wrongly giving responses such as:

- Tool A - Jack plane
- Tool B - flat file

Question 2

In this question candidates were given a table with tool/item of equipment, name and specific use. Candidates were required to name the tools and give specific use on each.

Comments:

Most candidates were able to give only one tool correctly some did not get even one.

Expected response:

- Tool 1 Machine vice - used to hold work firmly when drilling
- Tool 2 Micrometer - for measurements of external diameter and thickness

Question 3

In this question candidates were shown a wall-mounted bench that is used outdoors. They were required to explain how anthropometric data is used to decide the height at which the bench could be fixed to a wall.

Comments:

Very few candidates manage to relate the bench height to the data of vertical distance from floor to the back of the knee.

Expected responses:

- It will provide dimensions' popliteal height i.e. depend on the distance from part of the leg behind the knees to the ground

Common mistakes:

- They were saying they used the average height of a person.
- Mount the bench on the wall with wall bolts.

Question 4

In this question candidates were shown a food container made from expanded polystyrene. They were required to give two reasons why expanded polystyrene has been used to make the food container.

Comments:

Well-answered question

Expected response:

- heat insulation
- cheap

- keep food warm, non-toxic, etc.
- light in weight
- easy to carry
- provide perfect cushioning

Common mistakes:

- easy to shape
- recyclable
- some referred it to none rusting not considering all plastics do not rust.

Question 5

Candidates were shown a powered tool in fig.4.

(a) Candidates were required to give the name of the tool.

Comment:

Majority of candidates were able to name the powered tool.

Expected response:

- Jig saw

Common mistakes:

- Some candidates called it scroll saw.

(b) Candidates were asked to name one advantage of using the tool on figure 4

Comment:

Majority of candidates were able to name one advantage which made them to score a valuable mark. Very few candidates gave an advantage that does not relate to the use of a jig saw, this led to the loss of the mark.

Expected response:

- Handheld, fast, cut smooth curves, speed can be varied, can cut at any angle.

Common mistakes:

- It is Portable

Material	Special property	Use
Mahogany	Straight grains, polishes well, durable, brown colour, water resistant, easy to work with, strong etc.	Furniture, boatbuilding, wood doors and windows, veneering, guitar bodies, shop/cabinet fittings
High carbon Steel	Extreme hardness, high strength, wear resistance, less ductile, less tough and less malleable. High melting point.	Making cutting tools that retain their sharp edges, gears, bolt and nuts, springs
Leather	Warm in winter, heat resistant, stretchy, resistant to tearing, flexing, puncture fire, fungi and chemical resistant	Footwear, gloves, wrist watch straps, bags, furniture, clothing

Question 6

Candidates were given a table showing materials and were required to give the property and use for each material.

Comment:

Well-answered question.

Expected response:

Common mistakes:

Material	Special property	Use
Mahogany	Weather resistant	Canoe
High carbon Steel	Corrosion resistant	Car engine blocks
Leather	Water resistant	No mistakes

Question 7

Candidates were to explain the reason of having two different shaped holes on a set and snap.

Comments:

Candidates had problem in answering this question.

Expected response:

- Shallow hole for shaping the round head rivet
- The deep hole for setting the rivet

Common mistakes:

- Most left blank spaces on this question.

Question 8

Candidates were to describe how brass sheet would be annealed.

Comments:

Most candidates did not do well on this question although some did get 1 mark out of 2 marks.

Expected response:

- Heat the brass
- Then leave it to cool slowly

Common mistakes:

- They were quenching the brass after heating it to bright read.

Question 9

(a) Candidates were shown a knock down fitting used to assemble wooden parts. They were asked to give the name for the knock-down fitting.

Comments:

Very few candidates were able to correctly name the knock-down fitting and they got the mark.

Expected response:

- Cam lock knock-down

Common mistakes:

- Roller lock or leave a blank space

(b) Candidates were required to name a piece of equipment that can be used to ensure the hole for the lock disc and the shaft aligns.

Comments:

Some candidates managed to state the correct piece of equipment and they got the mark.

Expected response:

- Drilling jig

Common mistakes:

- Drill tool or leave a blank space

Question 10

(a) Candidates were required to give a specific use of the PVA glue and tensol cement

Comments:

Quite a few candidates were able to give at least one of the two correctly.

Expected response.

- PVA - General gluing of wood
- Tensol cement – for joining acrylic together

Common mistakes:

- PVA – for canoe building or for gluing plastics
- Tensol cement – for joining plastics together.

Section B

Question 11

This question was the most popular question as there were 493 candidates who answered it out of 722 candidates.

Incomplete Go-kart design.

(a) Candidates were required to name two hardwoods suitable to make the main body of the go-kart.

Comments;

Well-answered question.

Expected response;

- Hard wood - Saligna/meranti/mahogany, beech, etc.

Common mistakes

- SAP
- Gum tree
- Lugagane
- MDF

(b) Candidates were required to state two advantages of using solid wood rather than a manufactured board

Comments:

Most candidates were able to give the advantages of solid wood over manufactured.

Expected response:

- withstand weather changes than man made boards
- more durable
- stronger

- solid wood can be easily given a fresh look/easily maintained
- easily recyclable

Common mistakes

- soft to work
- cheaper

(c) Candidates were to give two reasons why flat-pack products are very popular with customers.

comments:

Most candidates gave very good reasons that lead them to obtain valuable marks.

Expected response:

- they are cheaper
- customers have a feel they have contributed in producing them
- have easy to follow manuals
- transported easily
- save storage space
- modular design

Common mistakes:

- easy to make

(d) (i) Candidates were required to name a portable power saw that could be used to cut out the shape of the side support from a rectangular piece of wood.

Comments:

Majority of candidates managed to state the correct saw, and they managed to get the mark.

Expected response:

- Jig saw

Common mistakes:

- Scroll saw

(ii) Candidates were to give one safety precaution you would take when using the saw named in (i).

Comments:

A good number of candidates managed to give one safety precaution, and they managed to get the mark.

Expected response: any **two** Safety precaution when using jig saw;

- Wear safety glasses,
- hearing protection
- dust mask
- secure work
- protect the workbench

Common mistakes:

- wear apron

(iii) Candidates were to show with sketches and notes to how the side support could be attached to the main body.
Comments:

Most candidates were able to show how the side could be fixed to the main body

Expected response:

- Relevant sketches
- Appropriate method of attaching
- Relevant notes/labelling of the fixings used

Common mistakes:

- Irrelevant sketches
- Inappropriate method of attaching like glue and nails
- Irrelevant notes

(e) (i) Candidates were asked to use sketches and notes to show how to cut out the screw threads on the diameter 12 mm axel end they were required to include the rod end preparation, holding devices and cutting tool used.

Comments:

Very few candidates had an idea of thread cutting by hand this led to the majority to lose marks.

Expected response

i Sketch showing chamfering of the rod end while held in the vice

ii Sketch showing thread cutting using a die

iii Die holder perpendicular to the rod

iv Show forward and back action

Common mistakes:

- Candidates would show a sketch of the rod with threads and held horizontally in a vice and use a saw.

(ii) Candidates were required to use sketches and notes to show how to coat the handle with plastic.

Comments:

Very few candidates managed to remember the coating process thus they would get 2 out of 4 those who attempted the question.

Expected response:

- Relevant sketch/s and notes
- Heating the handle part
- Put it in the plastic powder
- Reheat it for smooth finish

Common mistakes:

candidates used wrong method which resulted in loss of marks.

- Heating using a vacuum forming machine
- Heat pressing

(f) Candidates were to show with sketches and notes on how the kart seat would be modified and add strength to it.

Comments:

Most candidates were able to show the modification of the kart with added support which was awarded marks

Expected response:

- Relevant sketch
- Appropriate improvement
- Additional materials
- Appropriate constructions/fitting/fixings
- Relevant notes

Common mistakes:

- Candidates repeated the response of (d) (iii) method which resulted in loss of marks,
- Showing simply the attachment of the side to the main body.

Question 12

This question was the least popular question as there were **100** candidates opted for it out of **722** candidates.

(a) Candidates were asked to state one advantage of thermoplastic sheet other than it can be heated and bent to shape.

Comments:

The majority of the candidates managed to state the advantage of thermoplastics over thermosetting plastics, and marks were awarded.

Expected response:

- thermoplastic can be reshaped if the toothbrush holder was incorrectly shaped
- hygienic,
- easy to clean,
- resist corrosion and water

Common mistakes:

- available in a wide range of colours

(b) Candidates were asked to name two methods of heating the thermoplastic sheet so that it can be bent to shape.

Comments:

Majority of candidates managed to correctly name the tool, which was awarded a mark

Expected response:

- strip heater/bender,
- heat gun

Common mistakes:

Candidates would state general heating methods ignoring its relevance such as:

- Oven
- Vacuum forming machine

(c) Candidates were expected to label the parts of the Injection molding machine.

Comments:

Very few candidates managed to remember or write the parts correctly

Expected response:

- A mould cavity
- B heater
- C hopper
- D screw

Common mistakes:

- candidates would mix up the parts resulting in loss of marks

(d) (i) Candidates were asked to use sketches and notes to show how the holder can be fixed on base

Comments:

Majority of the candidates were able to illustrate using both sketches and notes which was awarded marks.

Expected response:

- Relevant sketch
- Appropriate fixing method
- Relevant notes

Common mistakes:

- irrelevant sketches
- inappropriate fixing methods

(ii) Candidates we supposed to use sketches and notes to show how the tumbler cup can be raised to enable easy lifting.

Comments:

Majority of the candidates managed to show sensible solutions of raising the cup more

Expected response:

- Relevant sketch
- Appropriate raising method
- Notes

Common mistakes:

- modify the cup instead of the stand

(iii) Candidates were expected to use sketches and notes to show how to plane the end grain of the base so that the hardwood does not split.

Comments:

Very few candidates were able to correctly draw any method of planning end grains.

Expected response:

- Relevant sketch
- Appropriate method
- Notes

Common mistakes:

- Showing an inappropriate method

(e) (i) Candidates were expected to explain what is meant by the term self-finished.

Comments:

Most candidates failed to define self-finish which resulted in loss of marks

Expected response:

- No external coating

Common mistakes:

- Most candidates would either leave it blank or state it comes ready finished which were not awarded marks.

(ii) Candidates were supposed to complete the stages to show how to finish the edges of the thermoplastic sheet used for the body of the toothbrush holder.

Comments:

Most candidates were able to get one mark as they were not clear of their expectations.

Expected response:

- Stage 2- use scraper/wet and dry paper to smooth edge
- Stage 3 – polish/buffing

Common mistakes:

- Majority of the candidates left this question unanswered.

(f) Candidates were required to use sketches and notes to show how the base could be joined to the base to produce a flush surface when made from mild steel sheet. Naming the tools and equipment used.

Comments:

Majority of the candidates were able to get half of the marks as they were omitting some stages.

Expected responses

- Relevant sketches
- Drilling rivet hole
- Countersink holes
- Riveting with ball-pein hammer
- Draw filing
- Polishing the surface

Common mistakes:

- Irrelevant sketches
- Not showing drilling step
- Rivet not flashing as there were no countersunk hole
- Rivet not draw filed

Question 13

This question was another least popular question as there were **129** candidates opted for it out of **722** candidates.

(a) Candidates were supposed to state two properties of mild steel that makes it suitable for the plant holder.

Comments:

Majority did well in this question and marks were awarded

Expected responses:

- tensile strength,
- tough,
- finish well.
- Strong
- Durable
- Easy to work
- Cheap

Common mistakes:

- Some candidates would put irrelevant property or leave it blank

(b) Candidates were expected to use sketches and notes to show how the at corner A could be welded.

Comments:

Majority of the candidates answered well, which was awarded accordingly.

Expected responses:

- Relevant sketch
- Work held in position
- Heat to required temperature/ earth the work
- Melt the spelter
- Protection

Common mistakes:

Majority of learners forgot to show their work for earthing and ignore safety clothing which resulted in loss of marks.

(c) (i) Candidates were supposed to name the specific type of drill bit that could be used to drill the Ø3 holes.

Comments:

This question was poorly answered.

Expected response:

- Twist bit

Common mistakes:

- Candidates would repeat the twist drill as their answer.

(ii) Candidates had to give two reasons why the acrylic base would be clamped to a piece of scrap wood when drilling the diameter Ø3 holes.

Comments:

This was well answered and marks were awarded

Expected responses:

- to prevent splitting/breaking underneath the base
- to secure the plastic for safe drilling
- to prevent damage to surface underneath base
- to prevent damage to drill bit
- to stop plastic moving around
- indicates when the drill has cut through the work piece
- to produce a clean hole,
- preventing vibration

Common mistakes:

- left the question unanswered
- giving irrelevant reasons

(d) (i) Candidates were asked to name two marking out tools that could be used to mark centres 'A'

Comments:

This question was well answered.

Expected response:

- Steel rule,
- Try -square,
- Scriber
- Odd-leg calipers
- Centre punch
- Scribing block/surface plate

Common mistakes:

Some candidates would put center punch and dot punch as two tools and they will be awarded 1 mark.

(ii) Candidates were asked to use sketches and notes to show how the mild steel strip would bend to shape at 'B'.

Comments:

Most of the candidates showed clearly the process which was awarded

Expected responses:

- Metal strip held securely in vice or around former
- Method of force: mallet or hammer
- Relevant sketches and notes

Common mistakes:

Some of the candidates would not show the work when held securely, which resulted in them losing marks.

(iii) Candidates were asked to give two reasons why the mild steel bracket would be painted.

Comments:

Candidates were able to get all the marks well answered.

Expected response

- Attractive appearance,
- Protect metal from corrosion/rusting

(e) Candidates were supposed to explain what the term 'sustainable' means.

Comments:

Candidates could not explain the term

Expected responses:

- It means involving the use of natural material/products and energy in a way that does not harm the environment.

Common mistakes:

- Candidates would talk about random things which were irrelevant
- Leave blanks

(f) Candidates were supposed to use sketches and notes to show how the plant holder could be made free standing at a height of 500mm above ground.

Comments:

This question was well answered

Expected response:

- Some form of recognizable 'legs'
- Supported at 500 heights
- Plant holder 'fits' into/onto 'leg' support
- Suitable materials
- Appropriate constructions and fittings
- Relevancy of design sketches
- Relevant notes

Common mistakes:

- ignored the height, freestanding which resulted in loss of marks.

PAPER 6902/04

Coursework

Design and Technology Paper 4 is a coursework paper and a school-based component of the syllabus that is compulsory to all candidates registered for Design and Technology. Each candidate undertakes a personally identified project centred on the given theme. The project is worked over the terms of the course, then submitted for marking. Teachers carried out the assessment of work as markers and as internal moderators for only one criterion (Product Realisation). This time around (1573) students were registered compared to (1092) from the previous year 2024.

Candidate's folders were presented for marking. There was an increase in four (4) centres compared to one hundred and seven (107) centres who were registered in 2024. This year we have 111 centres registered. Of the centres, one thousand five hundred and seventy-three (1573) candidates were registered, one thousand five hundred and thirty-three (1533) candidates submitted work for this year's examination. However, there was a serious concern of forty (40) candidates who were registered but could not submit work for 2025 coursework examination.

We have taken note that students do start their coursework nicely when the theme is launched, the preliminary stage of the work is evident, but due to the demand in time for the work and pressure from the other subject teachers some students tend to quit the project but reappear to do the written papers. Teachers are requested to submit at least the little candidates do before quitting. It is difficult to understand when a candidate is unable to score anything at all yet there is evidence of work done in the preliminary stages. Teachers should not be angry at the candidates and decide to throw away the least of the work they have done.

General Comments

Generally, the 2025 overall performance indicated a decline when compared to the previous year 2024. The work presentation displayed on the folios indicated a decline in performance from both teachers and candidates. Most candidates seemed to have been misguided towards understanding the syllabus requirements. Most of the projects proved to be pre-conceived and did not follow the given theme. This resulted in candidates losing a lot of marks. A few candidates were tempted to recycle old projects from previous themes e.g. Protection.

Folios

It was good to note that all centres used the correct folio paper size. Folios were graphically presentable on A3 size paper and easy to read and to follow, except for a few centres that submitted folios with very small fonts while there were ample blank spaces. Centres are urged to present portfolios in landscape. Candidates must bind their portfolios neatly and if slide binders are used, it is advisable to staple the sheets together before binding. However, the use of a spiral binder is recommended to ensure that no sheets are lost. Centres should arrange their candidates' folios numerically before submitting them to Examinations Council.

It was very discouraging to realise a high increase in the number of candidates who did not submit their work Teachers are encouraged to collect work from learners as they complete each stage of the design process to reduce candidates who at the completion of the work are indicated as absent candidates. Some centres did not pay attention to the attendance registers; some registers were missing or wrongly marked. The note mentioned in the last two paragraphs has always been made but there are no improvements from centres. We have taken note that teachers do not read the reports, yet they can assist a lot in improving the results of the candidates.

Comments on specific Assessment Objectives.

Theme analysis

This section was well done by most candidates. Most candidates defined the theme by breaking it down into personal, time and then usage. Some could not define the complete phrase personal time usage. Also, definitions according to their own understanding were not included. At some point sources were not cited. It was encouraging to note that most candidates indicated clear understanding of the theme. Few candidates did not indicate an area of interest in the theme analysis. In some centres candidates provided theme analysis [bubble charts] with limited links (must have at least three links). It was good to note that most candidates did not only indicate the area of interest but also indicated at least four general areas.

What was interesting was to note that a lot of candidates are embracing technology and using Ai to assist them in the definitions and preliminary research. This is encouraging but we advise that there should be no abuse of technology, in future we will make limits and put controls of such.

Identification of the need

Most candidates formulated personally identified problems that were relevant to the theme and successfully completed this objective. Centre assessment of this objective was reasonably accurate although few were not realistic and indicated limited guidance from the teacher. Some centres tended to follow a certain area of need identification such as games, gadgets/ books storage, relaxing seats and picnic equipment. It is, however, vital that the identification of a need may be accompanied with the evidence to prove the need to design. Most candidates used pictures to better explain the situation. The user must be considered, and it is important to explain how the user is affected in the situation.

Candidates must clearly indicate if the project will be completed as a model or actual product.

Research into the design brief resulting in a specification.

There was a wide range of responses to this assessment objective. Very good work was seen, that demonstrated an excellent understanding of the objective requirement. Few candidates indicated research that was not relevant to the design brief (mostly research on material). The difference between centres who did the research right and those who didn't was quite noticeable.

Many candidates had evidence of existing ideas, which were downloaded from internet and others in the form of photographs. However, candidates should note that research should have a wide range of existing ideas (with a minimum of six). The ideas must not be on a single concept and include relevant identified and collected data. Most candidates indicated little understanding about the difference between ergonomics and anthropometric data. Candidates improved significantly in the user research and data presentation.

It was good to note that most candidates included the specification in their research which was clear and concise. It is important that the specification is not only specific but also link with the brief analysis and is a conclusion of the research based on the design brief. On the specifications, teachers should assist learners to align their specification items with the analysis. Candidates are encouraged to include the function on their specifications. Some candidates seemed not to understand the meaning of researching existing ideas, as a result they did not analyse and evaluate their existing ideas. Candidates must be encouraged to collect relevant data as they research which must align with the design brief. It was noted that there was an improvement in the summarising of findings of the research, but other centres do not have any idea that the research summary carries some weight in the award of marks.

Generation of ideas.

The standard in attempting this objective was average, at least 6 design ideas were expected. Most candidates produced a wide range of possible ideas, however some ideas were not developed and evaluated against the design brief and specification. Some candidates' work demonstrated that they lacked drawing skills such as enhancement techniques and major dimensioning as a result, candidates reproduced existing ideas while others presented unidentifiable Computer Aided Drawings (CAD) which had optical illusion traits. Few candidates displayed good graphic skills and used pens. Generally, the ideas were well rendered and drawn.

On another note, candidates should be discouraged from drawing ideas that tend to focus on a single concept which also resulted in ideas that are like existing products, they must also be discouraged from downloading (cutting and pasting) drawings from internet and use them as possible ideas. They must neatly draw ideas either with a pencil, pen or using CAD. For all CAD drawings candidates must indicate the software they use. Candidates are encouraged to use free-hand sketching when producing ideas, rather than formal drawings, which limits their creativity. In the form of scanning, candidates are also encouraged to produce clear scanned ideas. Some ideas were not easy to read due to poor scanning. Candidates should rather cut and paste the original sketches instead of uploading blurry images.

It is also good to note that almost all candidates were indicating the chosen idea although some were without the selection matrix, justification and the key based on the specification points of the intended product.

Development of the proposed solution

There was decline again this year from most centres in attempting this criterion, this was the most poorly attempted criterion. Candidates lost marks due to insufficient changes in the development

of the chosen idea. Candidates must be encouraged to show at least three changes for improvement within the development which should be accompanied by notes justifying the reasons for improvements. It was good to note that some candidates were able to produce appropriate evidence of testing and or trailing resulting in reasoned decisions about material, form and construction details. Candidates who did not make mock-ups and tested them lost marks.

It is advised that candidates make mock-ups, test them and clearly state reasoned decisions about form, materials, construction/production methods etc. Candidates must always draw in full the resultant developed idea. There are a few centres that tend to stop at this stage, make a few changes on the mockup and paint it then call it their product realisation. Centres who encouraged candidates to do this made them lose a lot of marks.

Planning for production

This objective is always underperformed by most centres. Exploded views were well attempted by most candidates, candidates must identify and name all parts in this section. Working drawings lacked basic orthographic principles like dimensions, scales and symbols of projection. Cutting lists and part lists were well presented. Production plans were well set up but lacked sketches for the various stages of the sequence, in some centres these sketches are shared or duplicated, that is considered as malpractice. Candidates must avoid inserting production pictures at this stage. The observation with the flow charts is that most learners did not use the correct flow chart symbols but rather meaningless shapes, the flow chart meaningful shapes are found on Microsoft word under shapes-flowchart. As stated, above teachers do not read this report for if they did there would have been a drastic improvement in this area.

Product Realisation.

For this objective centres are requested to ensure that there is evidence of the production stages for the prototype. The complete product must also be presented in pictures taken from different views and at least a few to show details of features like joints, links and special details.

The examiners depend on the pictures in awarding the candidates a mark. There were more problems with this part as it was noted that some teachers were not treating the coursework as an examination. Evidence of candidates' abandonment was noted as some candidates lack marks for this objective. Also, some learners did not have evidence of the product, but marks were entered into the mark sheet.

Testing and evaluation

Most candidates tested and evaluated their work, although to some candidates the evaluation was not against the design brief and specification, instead they stated general factors about what was done to the product and remarks about problems encountered during manufacture. Few candidates' testing was superficial in that it did not consider the views of the users or show the product in the environment for which it was designed.

It is encouraged that testing should be done based on the functionality or intended use of the project, not on measurements of the product, which some centres did. Centres are also advised to encourage candidates to test and evaluate their products against the brief & specification and include modifications and limitations.

Reminder to centres:

- The use of portfolio templates and duplication of portfolio content among learners remain prohibited and is tantamount to malpractice. Subject teachers are advised to refrain from such malpractice.
- Centres are reminded to ensure that all candidates are registered in the coursework assessment summary form.
- Marks should be added correctly on the Product Realisation Summary Form.
- All centres should have products marked and moderated and clearly show the distribution of the teacher's mark and the internally moderated mark.
- Teachers are reminded to submit the form to the head of centre for a counter signature and a school stamp.
- Eceswa will no longer call the heads of centres about missing marks and pictures.
- Attendance registers should be enclosed together with the summary forms and scripts.
- In a case where a student was unable to submit the coursework the centre must explain in writing addressed to Eceswa.

Markers and internal moderators should also consider the following:

- Professionalism must be exercised when marking the realization stage, teachers must do a thorough marking which is fair and just and refrain from deflating or inflating marks.
- Internal moderators should show mark distribution, not just the total. - The teacher teaching the group should not mark and do the internal moderation. That is malpractice rather than seeking help from teachers at neighboring schools if you are alone in the department.
- Teachers must check if all the documents, (summary sheet and attendance register) are appropriately completed and enclosed inside the envelope provided (ECESWA) envelope before submission.
- Please make a note if a candidate is absent for the exam but does write the other papers.

All centres must adhere to the deadline for submission of folios at ECESWA.





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