

KENYA CERTIFICATE OF BASIC EDUCATION

SENIOR SCHOOL ASSESSMENT

DECEMBER ASSIGNMENT 2026

GRADE 10 – WOOD TECHNOLOGY

Time: 2 Hours

LEARNER'S DETAILS

Name: _____ School: _____

Assessment Number: _____ Date: _____

School Code: _____ Signature: _____

INSTRUCTIONS TO CANDIDATES

1. Write your name in the spaces provided above.
2. Write the name of your school and your stream in the spaces provided.
3. Write your admission number and the date of the assessment in the spaces provided.
4. This paper consists of two sections: A and B.
5. Answer all questions in section A and section B.
6. Answer the questions in English.
7. All answers **MUST** be written in the spaces provided in the paper.
8. Do **NOT** remove any page from this question paper.

FOR OFFICIAL USE ONLY (EXAMINER'S USE)

SECTION	SECTION A	SECTION B	% SCORE	EE1	EE2	ME1	ME2	AE1	AE2	BE1	BE2
SCORE RANGE	30 MARKS	50 MARKS		90-100	75-89	58-74	41-57	31-40	21-30	11-20	1-10
	POINTS			8 POINTS	7 POINTS	6 POINTS	5 POINTS	4 POINTS	3 POINTS	2 POINTS	1 POINT
LEARNER'S TOTAL SCORE											

SECTION A (30MARKS)

Answer **ALL** questions in this section.

1.

a) State **one reason** why woodwork has developed over time. **(1 mark)**

b) Name **two careers** related to woodwork. **(2 marks)**

i. _____

ii. _____

2.

State **three ways** in which woodwork contributes to the economic development of a country. **(3 marks)**

- i. _____
- ii. _____
- iii. _____

3.

a) State **two features** of a well-designed wood workshop. **(2 marks)**

- i. _____
- ii. _____

b) State **one factor** that should be considered when arranging the layout of a wood workshop. **(1 mark)**

4.

State **three safety precautions** that should be observed when working in a wood workshop. **(3 marks)**

- i. _____
- ii. _____
- iii. _____

5.

Classify each of the following tools according to their main function:

- a) Jack plane _____ **(1 mark)**
- b) Tenon saw _____ **(1 mark)**
- c) Try square _____ **(1 mark)**

6.

Give **three reasons** why hand tools should be properly maintained. **(3 marks)**

- i. _____
- ii. _____
- iii. _____

7.

a) State **one condition** necessary for healthy growth of timber trees. **(1 mark)**

b) Name **two classifications of timber trees** based on the type of wood they produce. **(2 marks)**

- i. _____
- ii. _____

8.

Name the following parts of a tree trunk:

- a) The outer protective layer _____ **(1 mark)**
- b) The layer through which water and minerals move upwards _____ **(1 mark)**
- c) The central part of the trunk _____ **(1 mark)**

9.

a) Name **one method of timber conversion**. **(1 mark)**

b) Name **one method of timber seasoning**. **(1 mark)**

c) State **one reason** for seasoning timber. **(1 mark)**

10.

a) What is an adhesive? **(1 mark)**

b) State **two characteristics** of a good wood adhesive. **(2 marks)**

- i. _____
- ii. _____

SECTION B: 50 MARKS

Answer ALL questions in this section.

11.

a) State **two methods** used to transport timber logs from the forest to a timber-processing area. **(2 marks)**

- i. _____
- ii. _____

b) Explain **two factors** that influence the choice of a method of transporting timber logs. **(2 marks)**

- i. _____
- ii. _____

c) Name **three methods of timber conversion**. **(3 marks)**

- i. _____
- ii. _____
- iii. _____

d) State **one difference** between natural seasoning and artificial seasoning. **(1 mark)**

- i. _____
- ii. _____
- iii. _____

e) State **two reasons** why converted timber should be properly stacked during seasoning. **(2 marks)**

- i. _____
- ii. _____

12.

a) Distinguish between a **hand tool** and **workshop equipment**. **(2 marks)**

b) Give **four examples of hand tools** used in woodwork. **(4 marks)**

- i. _____
- ii. _____
- iii. _____
- iv. _____

c) State **two safety precautions** when using a woodworking machine or workshop equipment. **(2 marks)**

- i. _____
- ii. _____

d) Explain **one importance** of using the correct tool for a particular operation. **(1 mark)**

e) State **one way** of storing hand tools safely after use. **(1 mark)**

13.

a) List **four processes** involved in preparing timber for woodworking. **(4 marks)**

- i. _____
- ii. _____
- iii. _____
- iv. _____

b) State **two operations** that can be carried out on prepared wood. **(2 marks)**

- i. _____
- ii. _____

c) Name **two woodworking joints** used in the construction of wooden products. **(2 marks)**

- i. _____
- ii. _____

d) State **two roles of joints** in wood products. **(2 marks)**

- i. _____
- ii. _____

14.

a) Name the following woodworking joints:

i. A joint in which one member has a projection that fits into a corresponding hole in another member. **(1 mark)**

ii. A joint formed by fitting two pieces together after removing equal portions from each. **(1 mark)**

iii. A joint in which two pieces are joined end-to-end using a connecting member. **(1 mark)**

iv. A joint formed by joining two pieces along their edges. **(1 mark)**

b) Outline **four main steps** followed when preparing a mortise and tenon joint. **(4 marks)**

- i. _____
- ii. _____
- iii. _____
- iv. _____

c) Name **two fasteners** commonly used in woodworking. **(2 marks)**

- i. _____
- ii. _____

15.

a) State **three reasons** for finishing a wooden product. **(3 marks)**

- i. _____
- ii. _____
- iii. _____

b) Name **three materials or tools** used when preparing a wood surface for varnishing. **(3 marks)**

- i. _____
- ii. _____
- iii. _____

c) Outline **two steps** followed when preparing a wooden surface for applying clear varnish. **(2 marks)**

- i. _____
- ii. _____

d) State **one skill** acquired when constructing a furniture item as a project. **(1 mark)**

e) State **one importance** of applying clear varnish to a wooden product. **(1 mark)**

MARKING SCHEME

SECTION A: 30 MARKS

1. Overview of Woodwork — 3 marks

a) One reason for development of woodwork: **(1 mark)**

- Development of human needs.
- Need for shelter and furniture.
- Availability of timber.
- Development of tools and technology.
- Need for income/employment.

Any one — 1 mark

b) Careers related to woodwork: **(2 marks)**

- Carpenter
- Cabinet maker
- Furniture designer
- Woodwork teacher
- Joiner
- Wood technologist
- Woodwork technician

Any two × 1 = 2 marks

2. Woodwork and Economic Development — 3 marks

Ways woodwork contributes to economic development:

- Creates employment opportunities.
- Generates income.
- Provides furniture and other useful products.
- Promotes trade.
- Generates government revenue through taxation.
- Promotes development of small businesses.
- Provides raw materials for industries.
- Earns foreign exchange through exports.

Any three × 1 = 3 marks

3. Wood Workshop — 3 marks

a) Features of a well-designed wood workshop: **(2 marks)**

- Adequate lighting.
- Adequate ventilation.
- Sufficient working space.
- Proper storage facilities.
- Safe electrical installation.
- Strong and suitable floor.
- Adequate water supply.

Any two × 1 = 2 marks

b) One factor considered when arranging workshop layout: **(1 mark)**

- Safety.
- Available space.
- Workflow.
- Position of machines.
- Accessibility.
- Lighting and ventilation.

Any one — 1 mark

4. Safety in the Wood Workshop — 3 marks

Safety precautions:

- Wear appropriate PPE.
- Keep the workshop clean and tidy.
- Use the correct tool for each operation.
- Do not run in the workshop.
- Report damaged tools.
- Store tools properly after use.
- Follow workshop instructions.
- Keep hands away from cutting edges.
- Switch off machines after use.

Any three × 1 = 3 marks

5. Hand Tools — 3 marks

a) Jack plane — **Woodworking/planing tool (1)**

b) Tenon saw — **Cutting/sawing tool (1)**

c) Try square — **Measuring (1)**

6. Safe Use and Maintenance of Tools — 3 marks

Reasons for maintaining tools:

- Prolongs tool life.
- Improves efficiency.
- Ensures accuracy.
- Reduces accidents.
- Prevents rust and deterioration.
- Saves replacement costs.
- Keeps tools in good working condition.

Any three × 1 = 3 marks

7. Growth of Timber Trees — 3 marks

a) One condition necessary for healthy growth: **(1 mark)**

- Adequate water.

- Suitable soil.
- Adequate sunlight.
- Suitable temperature.
- Nutrients.

Any one — 1 mark

b) Classification of timber trees: **(2 marks)**

- Hardwood trees.
- Softwood trees.

2 × 1 = 2 marks

8. Cross-section of a Tree Trunk — 3 marks

a) Outer protective layer — **Bark (1)**

b) Layer through which water and minerals move upwards — **Sapwood (1)**

c) Central part of trunk — **Heartwood (1)**

9. Timber Conversion and Seasoning — 3 marks

a) One method of timber conversion: **(1 mark)**

- Plain sawing.
- Quarter sawing.
- Through-and-through sawing.
- Tangential sawing.
- Radial sawing.

Any one — 1 mark

b) One method of seasoning: **(1 mark)**

- Air seasoning.
- Kiln seasoning.
- Water seasoning.
- Chemical seasoning.

Any one — 1 mark

c) One reason for seasoning timber: **(1 mark)**

- Reduce moisture content.
- Prevent excessive shrinkage.
- Reduce warping.
- Increase strength.
- Improve durability.
- Improve workability.

Any one — 1 mark

10. Adhesives — 3 marks

a) Adhesive: **(1 mark)**

A substance used to join/bond two or more surfaces together.

b) Characteristics of a good wood adhesive: **(2 marks)**

- Strong bonding ability.
- Durable.
- Sets within a reasonable time.
- Resistant to moisture where required.
- Easy to apply.
- Does not damage the wood.
- Suitable for the materials being joined.

Any two × 1 = 2 marks

SECTION B: 50 MARKS

11.

a) Methods of transporting timber logs — 2 marks

- Road transport — **1**
- Railway — **1**
- Water transport — **1**
- Animal transport — **1**
- Skidding/tractors — **1**

Any two × 1 = 2 marks

b) Factors influencing transportation method — 2 marks

- Distance to be covered.
- Terrain/topography.
- Availability of roads.
- Cost.
- Size and weight of logs.
- Availability of transport.
- Accessibility of the forest.

Any two × 1 = 2 marks

c) Methods of timber conversion — 3 marks

- Plain/tangential sawing.
- Quarter/radial sawing.
- Through-and-through sawing.
- Rift sawing.

Any three × 1 = 3 marks

d) Difference between natural and artificial seasoning — 1 mark

- **Natural seasoning** uses natural environmental conditions such as air and sunlight, while **artificial seasoning** uses controlled methods such as kilns.

1 mark

e) Reasons for proper stacking — 2 marks

- Allows free circulation of air.
- Prevents warping.
- Prevents fungal attack.
- Promotes uniform drying.
- Keeps timber off the ground.
- Prevents physical damage.

Any two × 1 = 2 marks

12.

a) Difference between hand tool and workshop equipment — 2 marks

Hand tool: A tool operated mainly by hand to perform a particular woodworking operation. **(1)**

Workshop equipment: Larger apparatus, machinery or facilities used to support or carry out workshop operations. **(1)**

b) Examples of hand tools — 4 marks

Any four:

- Tenon saw.
- Jack plane.
- Try square.
- Chisel.
- Mallet.
- Marking gauge.
- Smoothing plane.
- Screwdriver.
- Claw hammer.
- Brace.

4 × 1 = 4 marks

c) Safety precautions when using machines/equipment — 2 marks

- Wear appropriate PPE.
- Inspect equipment before use.
- Keep hands away from moving parts.
- Do not operate faulty equipment.
- Switch off equipment after use.
- Follow operating instructions.

Any two × 1 = 2 marks

d) Importance of using correct tool — 1 mark

- Ensures accurate work.
- Improves efficiency.
- Reduces damage to materials.

- Prevents accidents.
- Produces quality work.

Any one — 1 mark

e) Safe storage of hand tools — 1 mark

- Store tools in a tool cabinet/rack after cleaning them.

1 mark

13.

a) Processes involved in preparing timber — 4 marks

Any four:

- Measuring.
- Marking out.
- Sawing/cutting.
- Planing.
- Squaring.
- Straightening.
- Chiselling.
- Smoothing.
- Checking dimensions.

4 × 1 = 4 marks

b) Operations on prepared wood — 2 marks

Any two:

- Drilling.
- Chiselling.
- Sawing.
- Planing.
- Routing.
- Sanding.
- Grooving.
- Rebating.

2 × 1 = 2 marks

c) Woodworking joints — 2 marks

Any two:

- Mortise and tenon.
- Dowel joint.
- Butt joint.
- Halving joint.
- Housing/dado joint.
- Edge joint.
- Bridle joint.

- Lap joint.

2 × 1 = 2 marks

d) Roles of joints — 2 marks

- Join two or more pieces of wood.
- Provide strength.
- Improve stability.
- Enable construction of furniture.
- Improve appearance.
- Allow different components to be assembled.

Any two × 1 = 2 marks

14.

a) Identify the joints — 4 marks

- i. Projection fitting into a corresponding hole — **Mortise and tenon joint (1)**
- ii. Equal portions removed from two members and fitted together — **Halving joint (1)**
- iii. Two pieces joined end-to-end using a connecting member — **Dowel joint (1)**
- iv. Two pieces joined along their edges — **Edge joint (1)**

b) Steps in preparing a mortise and tenon joint — 4 marks

Any correct sequence:

1. Select and prepare the timber. **(1)**
2. Mark out the mortise and tenon accurately. **(1)**
3. Cut/chisel the mortise and saw the tenon. **(1)**
4. Test-fit the joint and make necessary adjustments. **(1)**

c) Fasteners used in woodworking — 2 marks

Any two:

- Nails.
- Screws.
- Bolts.
- Staples.
- Brads.

2 × 1 = 2 marks

15.

a) Reasons for finishing a wooden product — 3 marks

- Improves appearance.
- Protects wood from moisture.

- Protects against dirt.
- Increases durability.
- Enhances natural grain.
- Makes the surface easier to clean.
- Protects against wear.

Any three × 1 = 3 marks

b) Materials/tools for surface preparation — 2 marks

Any two:

- Sandpaper.
- Scraper.
- Sanding block.
- Wood filler.
- Clean cloth.
- Brush.
- Cabinet scraper.

Any two × 1 = 2 marks

c) Preparing surface for clear varnish — 1 mark

- Plane/scrape and sand the surface until it is smooth, clean and free from dust.

1 mark

d) Skill acquired from furniture project — 1 mark

Any one:

- Measuring.
- Marking out.
- Cutting.
- Jointing.
- Assembly.
- Finishing.
- Problem-solving.
- Tool handling.

1 mark

e) Importance of clear varnish — 1 mark

- Protects the wood while enhancing its appearance/natural grain.

1 mark

Furniture sketch — 2 marks

Award for a simple furniture item such as a stool, table, chair or bookshelf:

- Appropriate and recognisable furniture design — **1 mark**
- Neat, proportional and clearly drawn — **1 mark**

KENYA CERTIFICATE OF BASIC EDUCATION

SENIOR SCHOOL ASSESSMENT

TERM 3: PROJECT BASED ASSESSMENT 2026

**GRADE 10 – WOOD TECHNOLOGY
LEARNER'S DETAILS**

Name: _____ **School:** _____

Assessment Number: _____ **Date:** _____

School Code: _____ **Signature:** _____

PROJECT TITLE:

DESIGNING AND MAKING A SMALL WOODEN HOUSEHOLD/CLASSROOM PRODUCT

Time: To be completed over an appropriate school workshop period.

PROJECT TASK

Each learner is required to **design and make one useful small wooden product** using locally available timber and appropriate woodworking tools.

The learner may choose **ONE** of the following:

- Small book stand
- Wooden phone stand
- Small stool
- Wall-mounted key holder
- Small serving tray
- Desk organiser
- Small bookshelf
- Coat hanger
- Wooden storage box
- Simple plant stand

The final product should demonstrate the learner's ability to **plan, measure, mark out, cut, shape, join, assemble and finish wood safely and accurately.**

SECTION C: RELATED DRAWINGS

INTEGRATED WITH SECTION B

The following drawing task forms part of Question 15.

Drawing Task

A learner is required to design a simple wooden furniture item.

Make a neat freehand sketch of ONE simple furniture item of your choice and show the main parts of the item.

Examples include:

- Stool
- Small table
- Bookshelf
- Chair
- Bedside table

(5 marks)

Assessment of the sketch:

- Appropriate furniture design — **1 mark**
- Correct proportion — **1 mark**
- Clear representation of parts — **1 mark**
- Neatness — **1 mark**
- Appropriate use of drawing conventions — **1 mark**

PROJECT REQUIREMENTS

The learner should:

1. Identify a need

Explain the problem or need that the proposed wooden product will address.

2. Prepare a design

Produce a **freehand or instrument-drawn sketch** of the proposed product and clearly label its major parts and dimensions.

3. Prepare materials and tools

Identify the timber, other materials, tools and equipment required.

4. Prepare the timber

Select suitable timber and carry out appropriate measuring, marking, cutting and surface preparation.

5. Construct the product

Use appropriate woodworking techniques and at least **one suitable woodwork joint** where applicable.

6. Finish the product

Prepare the surface and apply an appropriate wood finish.

7. Observe safety

Demonstrate correct workshop safety and housekeeping throughout the project.

8. Evaluate the product

State whether the finished product meets the intended purpose and suggest improvements.

PROJECT DOCUMENTATION

Each learner should submit a short project record containing:

A. Project title

B. Problem/need identified

C. Objectives

D. Design/sketch with dimensions

E. Materials required

F. Tools and equipment required

G. Procedure followed

H. Safety precautions observed

I. Challenges encountered and solutions

J. Evaluation of the finished product

K. Suggestions for improvement

ASSESSMENT RUBRIC

Assessment Area	Criteria	Marks
1. Identification of need	Clearly identifies a relevant practical need/problem and explains the purpose of the product	2
2. Design and drawing	Produces a clear, appropriate and labelled sketch with relevant dimensions	3
3. Selection of materials and tools	Selects suitable timber, materials, tools and equipment	2
4. Measuring and marking out	Measures and marks accurately using appropriate tools and techniques	2
5. Cutting and shaping	Carries out cutting, planing, shaping and other processes accurately	2
6. Joining and assembly	Makes appropriate joint(s), assembles components correctly and produces a firm structure	3
7. Surface preparation and finishing	Prepares surfaces appropriately and applies a suitable finish neatly	2
8. Safety and housekeeping	Consistently observes workshop safety rules, PPE requirements and maintains a clean work area	2
9. Evaluation and creativity	Evaluates the product and demonstrates creativity, functionality and improvement ideas	2
TOTAL		20

PERFORMANCE RUBRIC

1. IDENTIFICATION OF NEED – 2 MARKS

2 marks: Clearly identifies a genuine need and explains how the proposed product will address it.

1 mark: Identifies a need but gives limited explanation.

0 marks: No relevant need identified.

2. DESIGN AND DRAWING – 3 MARKS

3 marks: Clear, well-proportioned and labelled design with appropriate dimensions.

2 marks: Generally clear design with some labels/dimensions.

1 mark: Basic/incomplete sketch.

0 marks: No meaningful design.

3. MATERIALS AND TOOLS – 2 MARKS

2 marks: Correctly selects suitable timber, materials and tools and gives appropriate reasons.

1 mark: Identifies some suitable materials/tools.

0 marks: Materials/tools are inappropriate or absent.

4. MEASURING AND MARKING – 2 MARKS

2 marks: Measures and marks accurately, independently and safely.

1 mark: Performs the operation with minor assistance/errors.

0 marks: Unable to measure or mark out appropriately.

5. CUTTING AND SHAPING – 2 MARKS

2 marks: Cuts and shapes components accurately with good workmanship.

1 mark: Performs the processes with minor inaccuracies.

0 marks: Unable to perform the required processes appropriately.

6. JOINING AND ASSEMBLY – 3 MARKS

3 marks: Joints are accurate, strong, properly fitted and the product is securely assembled.

2 marks: Product is adequately assembled but has minor inaccuracies.

1 mark: Assembly is weak or has significant inaccuracies.

0 marks: Product is not successfully assembled.

7. SURFACE PREPARATION AND FINISHING – 2 MARKS

2 marks: Surface is smooth, clean and appropriately finished with a neat appearance.

1 mark: Surface/finish is acceptable but has minor defects.

0 marks: Product is poorly prepared or unfinished.

8. SAFETY AND HOUSEKEEPING – 2 MARKS

2 marks: Consistently observes safety procedures, uses tools correctly, uses appropriate PPE and maintains excellent housekeeping.

1 mark: Generally safe but requires occasional reminders.

0 marks: Repeatedly ignores safety procedures or creates unsafe conditions.

9. EVALUATION AND CREATIVITY – 2 MARKS

2 marks: Product is functional, demonstrates creativity and includes a meaningful evaluation with realistic suggestions for improvement.

1 mark: Product is functional but demonstrates limited creativity/evaluation.

0 marks: No meaningful evaluation or product does not serve its intended purpose.

TEACHER'S PROJECT ASSESSMENT RECORD

Learner: _____

Admission No.: _____

Class: Grade 10 _____

Project: _____

Component	Maximum	Score
Identification of need	2	_____
Design and drawing	3	_____
Materials and tools	2	_____
Measuring and marking	2	_____
Cutting and shaping	2	_____
Joining and assembly	3	_____
Surface preparation and finishing	2	_____
Safety and housekeeping	2	_____
Evaluation and creativity	2	_____
TOTAL	20	_____ / 20

Teacher's Comment:

Teacher's Name: _____

Signature: _____

Date: _____

MARKING SCHEME

TOTAL: 20 MARKS

Since this is a **practical project**, there is no single model product that every learner must reproduce. The marking scheme below gives the expected evidence and performance standards for **any approved small wooden product**.

1. IDENTIFICATION OF NEED

2 MARKS

Expected answer:

The learner should identify a genuine practical problem or need and propose a wooden product that addresses it.

Award:

- **2 marks** – Clearly identifies a relevant need/problem and explains how the proposed product will solve or address the need.
- **1 mark** – Identifies a relevant need but explanation is incomplete.
- **0 marks** – No relevant need identified.

Examples of acceptable responses:

Product	Possible need addressed
Phone stand	Provides a convenient and stable place for holding a phone
Book stand	Holds books at a suitable reading angle
Key holder	Prevents loss and disorganisation of keys
Storage box	Provides storage for small items
Desk organiser	Keeps stationery and other materials organised
Small stool	Provides a simple seat
Bookshelf	Provides organised storage for books

2. DESIGN AND DRAWING

3 MARKS

The learner should produce a **clear sketch of the proposed product**, showing important parts and dimensions.

Award:

- **1 mark** – Appropriate sketch/design produced.
- **1 mark** – Major parts/components clearly labelled.

- **1 mark** – Appropriate dimensions indicated.

Full-mark evidence:

The drawing should:

- Relate directly to the proposed product.
- Show the general shape and construction.
- Include major components.
- Include realistic dimensions.
- Be sufficiently clear for another person to understand the proposed construction.

3. SELECTION OF MATERIALS AND TOOLS

2 MARKS

Expected answer:

The learner should identify appropriate:

Materials, such as:

- Suitable timber.
- Wood adhesive.
- Screws/nails/dowels where required.
- Sandpaper.
- Wood filler.
- Paint, varnish, polish, stain or other suitable finish.

Tools, such as:

- Steel rule/tape measure.
- Pencil/marketing knife.
- Try square.
- Marking gauge.
- Hand saw.
- Jack/block plane.
- Chisel.
- Mallet.
- Screwdriver.
- Hammer.
- Clamps/vice.
- Sanding equipment.

Award:

- **1 mark** – Selects appropriate materials for the project.
- **1 mark** – Selects appropriate tools/equipment.

4. MEASURING AND MARKING OUT

2 MARKS

Expected performance:

The learner should:

1. Select an appropriate reference edge/end.
2. Measure dimensions accurately.
3. Mark required lengths and widths.
4. Use suitable marking tools.
5. Check measurements before cutting.
6. Use a try square where a right-angle line is required.

Award:

- **2 marks** – Measures and marks accurately, uses appropriate tools and works independently.
- **1 mark** – Measures and marks adequately but with minor errors or assistance.
- **0 marks** – Unable to carry out accurate measuring and marking.

5. CUTTING AND SHAPING

2 MARKS

Expected performance:

The learner should:

- Select the correct saw/tool.
- Secure the workpiece.
- Follow the marked line.
- Cut accurately.
- Plane or shape surfaces appropriately.
- Avoid unnecessary wastage of timber.
- Produce components of the required dimensions.

Award:

- **2 marks** – Accurate cutting and shaping with good workmanship.
- **1 mark** – Cutting/shaping completed but with minor inaccuracies.
- **0 marks** – Unable to carry out the required operation satisfactorily.

6. JOINING AND ASSEMBLY

3 MARKS

The learner should use an appropriate woodwork joint or joining method suitable for the selected product.

Acceptable joining methods include:

- Butt joint.
- Housing joint.

- Halving joint.
- Mortise and tenon joint.
- Dovetail joint.
- Dowel joint.
- Mitre joint.
- Screwed joint.
- Nailed joint.
- Adhesive joint.

Award:

- **1 mark** – Appropriate joint/joining method selected.
- **1 mark** – Components are accurately fitted/aligned.
- **1 mark** – Final assembly is firm, strong and functional.

Full-mark performance:

The assembled product should:

- Be stable.
- Have properly fitting components.
- Have joints that are reasonably neat.
- Be free from major gaps.
- Be suitable for its intended purpose.

7. SURFACE PREPARATION AND FINISHING

2 MARKS

Expected procedure:

The learner should:

1. Inspect the surface.
2. Remove major tool marks.
3. Fill appropriate holes/cracks.
4. Plane or scrape rough areas.
5. Sand progressively.
6. Remove dust.
7. Apply an appropriate finish.

Acceptable finishes:

- Varnish.
- Paint.
- Wax.
- Polish.
- Wood stain.
- Oil.
- Lacquer.
- Suitable sealer/finish.

Award:

- **1 mark** – Surface appropriately prepared and made reasonably smooth.

- **1 mark** – Appropriate finish applied neatly.

8. SAFETY AND HOUSEKEEPING

2 MARKS

Expected safety practices:

The learner should:

- Wear appropriate PPE.
- Handle tools correctly.
- Secure the workpiece before cutting or shaping.
- Keep hands away from cutting edges.
- Use tools only for their intended purposes.
- Maintain a clean work area.
- Store tools safely after use.
- Dispose of wood waste appropriately.
- Follow instructions when using adhesives and finishes.
- Maintain proper ventilation where necessary.

Award:

- **2 marks** – Consistently demonstrates safe working practices and excellent housekeeping.
- **1 mark** – Generally observes safety procedures but needs occasional reminders.
- **0 marks** – Frequently ignores safety requirements or creates unsafe conditions.

9. EVALUATION AND CREATIVITY

2 MARKS

The learner should evaluate the completed product.

Expected evaluation points:

The learner may comment on:

- Functionality.
- Strength.
- Accuracy.
- Appearance.
- Stability.
- Durability.
- Suitability of materials.
- Quality of finish.
- Ease of use.
- Areas requiring improvement.

Award:

- **1 mark** – Gives a meaningful evaluation of whether the product meets its intended purpose.
- **1 mark** – Demonstrates creativity and/or gives realistic suggestions for improvement.

CONSOLIDATED MARKING SCHEME

No.	Assessment Area	Expected Evidence	Marks
1	Identification of need	Relevant problem/need and appropriate proposed solution	2
2	Design and drawing	Clear sketch, labels and dimensions	3
3	Materials and tools	Appropriate materials and tools selected	2
4	Measuring and marking	Accurate measurement and marking	2
5	Cutting and shaping	Accurate and safe cutting/shaping	2
6	Joining and assembly	Appropriate, accurate, strong assembly	3
7	Surface preparation and finishing	Smooth preparation and suitable finish	2
8	Safety and housekeeping	Safe tool use, PPE and clean workspace	2
9	Evaluation and creativity	Functional evaluation, creativity/improvement	2
	TOTAL		20

SAMPLE COMPLETED PROJECT ANSWER

Project: Wooden Phone Stand

A. Identified need – 2 marks

Problem: Phones are often placed flat on desks where they are difficult to view and may easily fall.

Solution: Make a small wooden phone stand that holds a phone securely in an upright or inclined position.

Score: 2/2

B. Design – 3 marks

The learner should provide a labelled drawing showing:

- Base.
- Back support.
- Front retaining lip.
- Phone-supporting surface.
- Appropriate dimensions.

Score: 3/3 where all requirements are correctly demonstrated.

C. Materials and tools – 2 marks

Materials:

- Timber.
- Wood adhesive.
- Small screws where necessary.
- Sandpaper.
- Varnish or paint.

Tools:

- Steel rule.
- Pencil.
- Try square.
- Hand saw.
- Plane.
- Chisel.
- Hammer/screwdriver.
- Clamps.

Score: 2/2

D. Measuring and marking – 2 marks

The learner measures the required components according to the design and marks the cutting lines accurately using a steel rule, pencil and try square.

Score: 2/2 if accurately performed.

E. Cutting and shaping – 2 marks

The learner:

- Secures the timber.
- Cuts components along marked lines.
- Shapes edges appropriately.
- Planes rough surfaces.

Score: 2/2 for accurate workmanship.

F. Joining and assembly – 3 marks

The learner joins the components using a suitable method, such as adhesive, screws or an appropriate joint.

The completed stand should be:

- Firm.
- Properly aligned.
- Stable.
- Functional.

Score: 3/3 if all are demonstrated.

G. Surface preparation and finishing – 2 marks

The learner:

1. Sands the surfaces.
2. Removes dust.
3. Applies varnish, paint, stain, polish or another appropriate finish.

Score: 2/2 for good preparation and neat finish.

H. Safety and housekeeping – 2 marks

The learner:

- Uses appropriate PPE.
- Handles tools correctly.
- Secures timber before cutting.
- Keeps hands away from cutting edges.
- Cleans the workstation.
- Stores tools correctly.

Score: 2/2 where consistently demonstrated.

I. Evaluation and creativity – 2 marks

Sample evaluation:

The phone stand is stable and holds the phone securely at a convenient viewing angle. The timber was easy to work and the final finish improved its appearance. The design could be improved by adding a cable-access slot at the back so that the phone can be charged while on the stand.

Score: 2/2

FINAL PROJECT SCORE

Component	Marks
Identification of need	2
Design and drawing	3
Materials and tools	2
Measuring and marking	2
Cutting and shaping	2
Joining and assembly	3
Surface preparation and finishing	2
Safety and housekeeping	2
Evaluation and creativity	2

TOTAL	20/20
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TEACHER'S FINAL ASSESSMENT

Learner's Score: _____ / 20

Performance Level: _____

Teacher's Comment:

Teacher's Name: _____

Signature: _____

Date: _____