

**REVISION EXERCISES (1)**

**TEST ON TIMBER, CONVERSION & SEASONING**

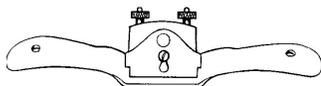
1. Describe with the aid of sketches: (a) the structure of a hardwood and a softwood, (b) the difference between heartwood and sapwood cells.
2. What is the advantage of quarter sawing a log?
3. Give reasons why timber must be seasoned before use.
4. (a) Name two methods of seasoning timber, and (b) Give two advantages and two disadvantages of each method.
5. Name two common methods of cutting veneers.
6. List some of the uses of plywood.
7. List some of the advantages of plywood.
8. Name three disadvantages of manufactured (man-made) boards.

**TEST ON HOLDING TOOLS**

1. Why is the G Clamp fitted with a swiveling clamp face?
2. What is the purpose of the mitre clamp?
3. Name the clamp used to assemble large work such as doors.

**TEST ON CUTTING TOOLS**

1. State the function of the following parts of a metal jack plane: (a) lateral adjustment lever (b) cap iron (c) lever cap
2. Name the handsaw that should be used for light curved work and removing waste from between dovetail pins.
3. What purpose is served by the brass or steel back on a tenon-saw?
4. Make a sketch of a firmer chisel and name its parts.
5. Name two patterns of the tool shown below.



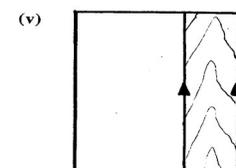
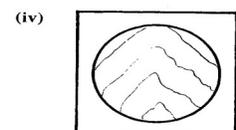
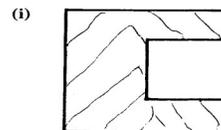
**TEST ON MARKING OUT & TESTING TOOLS AND**

**PERCUSSION TOOLS**

1. Describe with the aid of sketches, how a try square is tested for accuracy.
2. Briefly explain the difference between a try square and a combination square.
3. Why is one end of the arm of the pincers shaped like a claw?
4. What tool could be used to mark out angles other than 90° and 45° ?
5. Why is a wedge inserted in the head of a cross-pein hammer?

**TEST ON CIRCULAR SAW AND BAND SAW**

1. Name two safety devices which must be used when operating the circular saw.
2. Briefly explain the purpose of the mitre gauge on a circular saw.
3. Explain in sequence, the procedure when removing and replacing a blade on the circular saw.
4. State what determines the size of a bandsaw.
5. List five operations which can be done on a bandsaw.
6. With the aid of sketches, explain in sequence how the unshaded portions in Figures (i) to (v) below are removed using a bandsaw.



## REVISION EXERCISES (2)

### TEST ON DRILL PRESS, THICKNESS PLANER AND JIG OR SCROLL SAW

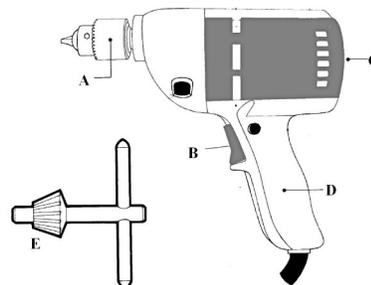
- 1 Drilling is not the only operation performed on the drill press. Name two others.
- 2 Name three safety measures which should be observed before starting the drill press.
- 3 State two specifications that determine the size of a thickness (or surface) planer.
- 4 Explain briefly how wood that becomes stuck in a surface planer, while planing, should be removed.
- 5 How is the size of a jig saw indicated ?
- 6 What is the most common cause of blade breakage in a jig saw?

### TEST ON RADIAL ARM SAW AND WOOD LATHE

- 1 What advantage does the radial arm saw have over the circular saw ?
- 2 List five safety precautions to follow when using the radial arm saw.
- 3 List three household implements which can be turned on a lathe.
- 4 State the difference between spindle turning and face plate turning with reference to the wood-turning lathe.
- 5 Explain with the aid of sketches, how stock is prepared for
  - (i) Turning between centres
  - (ii) Face-plate turning
- 6 Explain the term 'built-up stock'
- 7 Sketch two examples of built-up stock that is suitable for making a bowl and a turned table lamp.
- 8 List five safety precautions to follow when using the wood turning lathe.
- 9 State the function of each of the following parts of a wood turning lathe (a) the tailstock (b) the tool rest (c) the head stock.

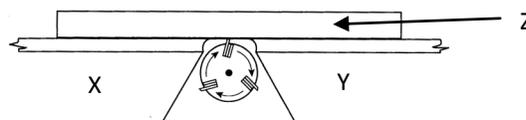
### TEST ON PORTABLE CIRCULAR SAW, SANDERS AND THE ROUTER

- 1 How is the size of a portable circular saw determined ?
- 2 Name the parts labeled A to E in the diagram below.



- 3 Explain the difference in the cutting action of an orbital sander and a belt sander.
- 4 What determines the quality of smoothness or roughness of the wood surface after sanding ?
- 5 Sketch and name five profiles that can be produced by a router.
- 6 Name four major parts of a router.
- 7 Name two types of routers sold and explain the difference between the two.

### TEST ON THE JOINTER

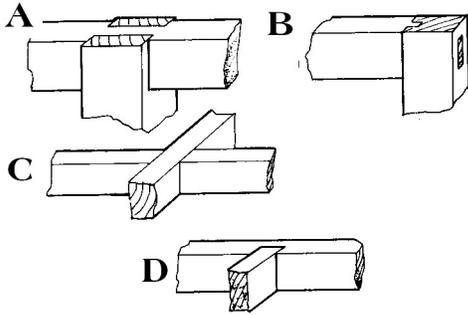


1. Name EACH of the parts labeled X, Y and Z.
2. List FOUR factors which determine the smoothness of a planed surface on the jointer.
3. Explain briefly, the position of a worker's hands in relation to the jointer when: (a) starting a cut (b) halfway through the cut and (c) completing the cut.

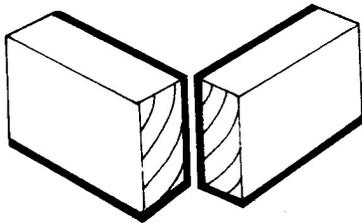
# REVISION EXERCISES (3)

## TEST ON WOOD JOINTS

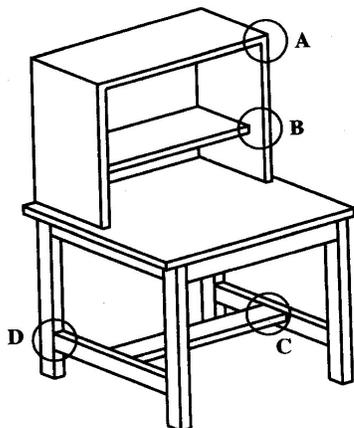
1. Name two articles that can be built using frame construction.
2. Name each of the joints marked A to D in the drawings below.



3. Show by means of sketches, two satisfactory ways of joining, other than by nailing, screwing or dowelling, the two pieces of wood shown below.



4. The figure below shows a study desk. You are required to name and provide exploded views for (i) TWO suitable joints for A (ii) ONE suitable joint each for B, C and D.



## TEST ON ABRASIVES, ADHESIVES AND FINISHES

1. What is the purpose of using an abrasive?
2. Name three backing materials for abrasives.
3. How does glass paper differ from garnet paper?
4. (i) What is casein glue made from ? (ii) Name one advantage and one disadvantage of casein glue.
5. Which glue would you consider to be the most suitable for the following purposes?
  - (a) applying a sheet of Formica to a fitted kitchen work surface.
  - (b) gluing together several veneers between curved formers to make laminated ribs for a canoe.
6. Define the following terms with reference to glue:
  - (a) Shelf life
  - (b) Open time
  - (c) Pot life
7. A project made of pine is to be finished in its natural shade, A second project made of pine is to be finished in a mahogany shade. BOTH projects are to be varnished. Describe the procedure for finishing **each** of the projects, from the preparation of surfaces to the finished coat.
8. (i) Name THREE types of stain, and (ii) List two reasons for staining a project.
9. Explain the purpose of the following ingredients used in the finishing process:
  - (a) Driers
  - (b) Pigment
  - (c) Solvent

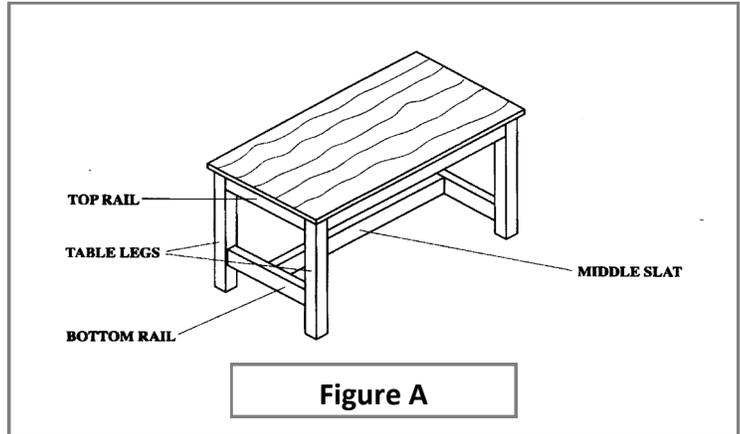
## REVISION EXERCISES (4)

1. The figure below (**Figure A**) shows the pictorial drawing of a small work table of height 750 mm, length of 1250 mm and a width of 600 mm. The structural framing for the table is designed using timber. The table top is built from 19 mm thick plywood and finished with plastic laminate.

(a) Sketch the following views of the work table:

- (i) a front elevation
- (ii) a plan view showing all main hidden details
- (iii) an end view

- (b) (i) indicate **the correct title for each sketch** in (a)  
 (ii) indicate **TWO** main dimensions for **each** view



2. **Figure B** below shows an incomplete front elevation of a storage cabinet with the following dimensions: length 1850 mm, depth 550 mm and height 900 mm. The carcass of the cabinet is made from 19 mm thick plywood. The section labelled **B** is to house a single cupboard door with a 3 mm thick glass fitted in a timber frame.

The sections labelled **C, D** and **E** are to house three drawers with chamfered edges fitted flush with the front.

**NOTE:** the top of the unit is to be extended 50 mm to the front. The back of the cabinet is covered with 6 mm plywood.

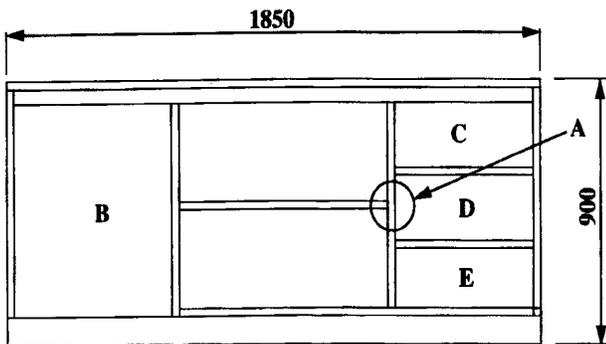


Figure B

- (a) Produce a neat pictorial sketch of the completed storage cabinet to include the cupboard door and the three shelves.
- (b) Make a neat rule-assisted sketch to show an exploded view of the joint at **A** in **Figure B**
- (c) State **FOUR** types of ironmongery that may be used on the door and drawers for the cabinet.
- (d) Suggest **TWO** types of finished that would be appropriate for the cupboard.

(e) **Name a suitable joint for each of the following situations as it relates to the storage cabinet:**

- (i) The connection of the drawer front to the drawer sides.
- (ii) The connection of the drawer back to the drawer sides.
- (iii) The connection of the drawer bottom to the drawer front or sides.
- (iv) Connecting the top rail to the side panel.
- (v) Securing the top of the cabinet to the side panel
- (vi) Where the drawer rail meets the side panel