



JOINERY 1
5500

JUNE XXXX

INTERMEDIATE LEVEL

Centre No. & Name	JOINERY 1
Candidate No.	5500
Candidate Name	

Mobile phones are **NOT** allowed in the examination room.

5500 JOINERY 1: MULTIPLE CHOICE QUESTION PAPER

1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you start answering the questions in this paper. Make sure you have a soft HB pencil and an eraser for this examination.

1. USE A SOFT HB PENCIL THROUGHOUT THE EXAMINATION.
2. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Before the examination begins:

3. Check that this question booklet is headed “**Intermediate Level – 5500 JOINERY 1.**”
4. Insert the information required in the spaces above.
5. Insert the information required in the spaces provided on the answer sheet using your HB pencil:

Candidate Name, Exam Session, Subject Code, Centre Number and Candidate Number.

Take care that you do not erase or fold the answer sheet or make any marks on it other than those asked for in these instructions.

How to answer the questions in this examination:

6. Answer **ALL** the **50** questions in this Examination. All questions carry equal marks.
7. Each question has **FOUR** suggested answers: **A, B, C** and **D**. Decide which answer is correct. Find the number of the question on the Answer Sheet and draw a horizontal line across the letter to join the square brackets for the answer you have chosen.
For example, if **C** is your correct answer, mark **C** as shown below:
[A] [B] [C] [D]
8. Mark only one answer for each question. If you mark more than one answer, you will score a zero for that question. If you change your mind about an answer, erase the first mark carefully, then mark your new answer.
9. Avoid spending too much time on any one question. If you find a question difficult, move on to the next question. You can come back to this question later.
10. Do all rough work in this booklet, using, where necessary, the blank spaces in the question booklet.
11. **You must not take this booklet and the answer sheet out of the examination room. All question booklets and answer sheets will be collected at the end of the examination.**

Turn Over

1. Describe hardwood trees.

- A coniferous
- B evergreen
- C deciduous
- D pine trees

2. A man-made board with compressed wood flakes is called

- A plywood
- B blackboards
- C chipboard
- D fibreboard

3. What is the main purpose of a materials list?

- A Identifies the components
- B Identifies types of materials needed
- C Identifies the position of components
- D identifies size, quantity, type of materials

4. State the factors that affect the hardness of timber

- A Strength and elasticity
- B Toughness and durability
- C Colouring and shape of cells
- D Wall thickness and size of cells

5. What is a flitch?

- A An upholstery nail
- B The width of a saw cut
- C A component of a chisel
- D A timber size classification

6. Which of the following is a non-waterproof adhesive?

- A PVA
- B Hot melt
- C Epoxy resin
- D Urea-formaldehyde

7. The presence of the bark along the edge of a board is called

- A Shake
- B Wane
- C Decay
- D Check

8. What determines the coarseness of sandpaper?

- A Grit size
- B Backing material
- C Garnet
- D Paper

9. Wood shrinkage mostly occurs

- A along the length (longitudinally)
- B Across the annual rings (radically)
- C In the direction of the annual rings
- D At interlocking grains

10. Identify the type of timber defect in figure one.

- A Collapse
- B Seasoning
- C Case hardening
- D Cup shake



Figure one

11. Name the timber conversion method shown in figure two.

- A Slash sawing
- B Quarter sawing
- C Flattening
- D Deeping



Figure two

12. This statement defines polyvinyl acetate.

- A A wood adhesive
- B A type of timber finish
- C A polymer for tool handles
- D A clear plastic

13. Name the type of hinge presented in figure three.

- A Parliament hinge
- B Sash hinge
- C Cabinet hinge
- D Butt hinge



Figure three

14. Why are setting out rods often painted white?

- A so they can be easily found
- B to conceal any defects in the wood
- C to aid in possible understanding
- D to protect the wood

15. The characteristic of a working rod includes

- A Full size dimensions
- B Pilot holes
- C Reduced scale objects
- D Templates

16. Choose a tool that may replace a pencil in marking out.

- A marking gauge
- B try-square
- C marking knife
- D callipers

17. As a hand tool, state the use of a dividers.

- A accurate checking of widths and gaps
- B marking out measurements
- C measuring angles
- D marking length and thickness

18. Identify the hand saw with the following

characteristics: 700 mm long, 3 to 4 teeth/ 25mm

- A cross cut saw
- B rip saw
- C tenon saw
- D coping saw

19. Select the best saw for cutting curves.

- A bow saw
- B panel saw
- C coping saw
- D bead saw

20. Name the type of chisel used for convex and concave work.

- A paring chisel
- B firmer chisel
- C Flat chisel
- D Gouge

21. Name the recommended hand plane for cleaning the corners of stopped housings.

- A rebate plane
- B bull nose plane
- C plough plane
- D block plane

22. State the hand tool used to make pilot holes.

- A rasp
- B bradawl
- C punch
- D countersink bit

23. The square shank of a drill bit is known as

- A Shoulder
- B Tang
- C thread
- D flute

24. Enumerate the correct sequence for hand saw maintenance

- A topping, shaping, setting, sharpening
- B shaping, topping, setting, sharpening
- C topping, setting, shaping, sharpening
- D topping, sharpening, setting,

25. Determine the grinding angle of a plane's cutter.

- A 20°.
- B 25°.
- C 30°.
- D 35°.

26. Figure Four below represents a workshop signal for

- A Warning
- B Prohibition
- C Information
- D Safe condition



Figure Four

27. Choose the correct joint for the assembly of legs and rails of a stool.

- A A lap joint
- B A butt joint
- C A finger joint
- D A mortise and tenon joint

28. Give the name of a hole drilled to receive the threaded part of a wood screw.

- A countersink
- B counterbore
- C shank
- D pilot

29. Explain why panels in solid timber doors must not be glued.

- A Assembly would be more difficult
- B Movement is needed within the frame

- C avoid waste of materials
- D It reflects poor craftsmanship

30. Identify a widening joint from the following.

- A bridle joint
- B biscuit joint
- C scribed joint
- D mortise and tenon joint

31. State the type of framing joint that hides the end grains of the wood.

- A Mitre
- B Bridle
- C Box pin
- D Halving

32. Indicate the pitch of a common dovetail joint.

- A 1:15
- B 1:12
- C 1:5
- D 1:3

33. Which of the following joints is made by cutting a recess across the grain of a board?

- A mitre
- B half-lap
- C butt
- D dado

34. Select the most appropriate joint for picture frames.

- A mitre
- B mortise and tenon
- C groove
- D half-lap

35. Outline the appropriate order in gluing of timber frame work.

- A Tighten cramps, remove glue, check square
- B Tighten cramps, check square, remove glue
- C Check square, tighten cramps, remove glue
- D Remove glue, check square, tighten cramps

36. Express the type of cut on the worked piece on figure five represents.

- A A Chamfer
- B A groove
- C A Rebate
- D A Bevel

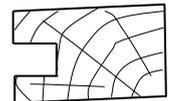


Figure Five

37. Describe a joinery element called "Mullion".

- A a vertical member of a roof truss
- B a vertical member on a panel door
- C a vertical member on a window frame
- D a vertical member of a table chair

38. The term honing refers to the action of

- A Oiling the cutting edge of a chisel

Turn over

- B Repairing the handle of a chisel
- C Sharpening process of the chisel
- D Using a chisel to bore a round hole

39. The size of a table saw is determined by the
- A length of the table
 - B width of the table
 - C blade diameter
 - D mitre gauge

40. Express the function of a peg on a work bench.
- A To support long pieces during planing
 - B To support long pieces during mortising
 - C To support long pieces for cross-cutting
 - D Support long pieces during sawing

41. If the hand saw blade tends to bind in the cut when ripping a board, it is best to
- A Use longer strokes
 - B Place a wedge in the kerf
 - C Wipe the blade with light oil
 - D Clamp the stock in a vice

42. Distinguish the hand tool in figure six.
- A Pull hammer
 - B Warrenton hammer
 - C Claw hammer
 - D carpenter hammer



Figure six

43. Indicate why during planing of a surface, the plane may cut in some areas and not on others.
- A The plane iron is dull
 - B The depth of the cut is too shallow
 - C Uneven surface
 - D Insufficient pressure is being applied

44. You should wear safety glasses in the shop
- A When working with sharp tools
 - B When you feel like wearing them
 - C At all times
 - D When using a power tool

45. Express the function of a Plough plane.
- A For planing flat surfaces
 - B For planing of tenon shoulders
 - C For cutting of grooves in timber
 - D For planing of end grains

46. Identify the hand tool on figure seven
- A Bow saw
 - B Coping saw
 - C Cross-cut saw



- D Fret saw

Figure seven

47. State the role of a fish-plate in roofs construction.
- A To increase thickness of rafters
 - B To increase the lengths of rafters
 - C To increase the widths of rafters
 - D To straighten the king post

48. The formula to calculate Moisture Content of timber is given by

A $M.C = \frac{\text{Dry weight} - \text{Wet weight}}{\text{Wet weight}} \times 100$

B $M.C = \frac{\text{Dry weight} - \text{Wet weight}}{\text{Dry weight}} \times 100$

C $M.C = \frac{\text{Wet weight} - \text{Dry weight}}{\text{Wet weight}} \times 100$

D $M.C = \frac{\text{Wet weight} - \text{Dry weight}}{\text{Dry weight}} \times 100$

49. Determine the size of the tenon (a) illustrated in figure eight below.

- A 6 mm
- B 10 mm
- C 12 mm
- D 15 mm

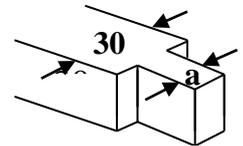


Figure eight

50. Calculate the height of the table if the thickness of the top is 5 cm

- A 400 mm
- B 450 mm
- C 660 mm
- D 405 mm

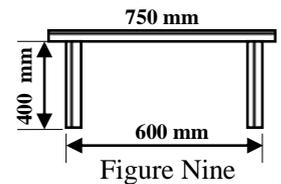


Figure Nine