

**Wood Manufacturing & Finishing**

**T1 theory Sample**

**Learner Instructions**

**General Instructions:**

1. Read the following carefully and make sure you understand all instructions. If you need clarification, check with the Supervisor/Assessor before the test begins.
2. Write your Apprentice Name/Registration No. on all answer sheets and assessment sheets.
3. Check that you have all the necessary materials before the test begins.
4. You must complete this test without assistance. Learners assisting other learners or interfering with their work will be disqualified from the test.
5. All test papers remain the property of SOLAS and the Department of Education and Skills, and must be returned to the Supervisor/Assessor immediately on completion of the test.
6. Mobile phones and other communication devices are not allowed.

**Specific Instructions:**

1. You should answer all 30 questions.
2. All questions carry equal marks.
3. To achieve a **pass** on this paper requires 21 or more questions to be answered correctly.
4. To achieve a **credit** on this paper requires 26 or more questions to be answered correctly.

**Time Allowed: 2 hours**

**Materials Required:**

- T1 Question book/paper
- HB pencil/pen
- Calculator
- Eraser

# Wood Manufacturing & Finishing

## Phase 6

### Sample Test Questions

Question 1. What could happen if a timber piece was too long when machining a tenon on the round end tenoning machine.

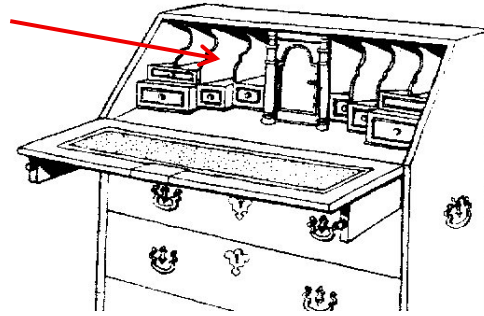

Question 2. What determines the depth of the mortice when setting up the slot mortice machine?


Question 3. A solid Oak tabletop 10 years old has a split running the length of the table around 350mm from the end. The top cannot be removed from the frame. What would you suggest is the best method of repair?


Question 4. Complete the name of the images below:



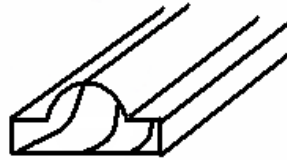
A. \_\_\_\_\_ table



B. \_\_\_\_\_ in a Bureau



C. \_\_\_\_\_ rail



D. \_\_\_\_\_ moulding

Question 5. A table finished in French polish shellac has a white ring mark on it. Explain what can cause a white ring mark and describe how you would treat this table's surface to restore it.


Question 6. Give 3 advantages of water-borne varnishes over solvent-borne varnishes?


Question 7. Draw any **two** of the following fittings **and** give an example of where they are used:

- (a) Straight Cupboard Lock      (b) Counter Hinge      (c) Quadrant Stay Hinge

Question 8. Briefly describe any **three** of the following stair terms:

Baluster	
Outer String	
Rise	
Nosing	

Question 9. Complete the following Building Regulations as they apply to a private stairs by filling in the blanks.

There should be no more than \_\_\_\_\_ risers in any one flight.

A sphere of \_\_\_\_\_ diameter should not be able to pass through any opening of the stairs.

A second handrail is required If the width of the stairs exceeds \_\_\_\_\_ in width.

Top and bottom of stairs should be at least \_\_\_\_\_ clear of door openings.

Question 10. Select a suitable going to comply with the  $2R + G$  formula of a private stairs with a total rise of 2,700mm. An optimum rise of 180mm is supplied. **Show all calculations.**


Question 11. €24,500 was invested at compound interest for 3 years. The first year rate was 5%. The second year rate was 4.5%. The third year rate was 4%. Calculate the final amount and the interest earned. **Show all calculations.**




Question 15. Explain what is the meant by the following Furniture Terms; Use sketches to support your answer.

Stretcher rail:	
Swan necked pediment:	
Angled glue blocks:	
13 pane bar door:	

Question 16. Provide the Standard Sizes for the following in relation to Furniture:

Optimum reach for shelf from kitchen worktop upwards while standing:	
Depth of Kitchen worktop:	
Maximum shelf height reach while sitting at a desk:	
Desk height to accommodate keyboard:	

Question 17. With regards to adhesives give four maintenance checks that should be carried out to ensure that the Edge-banding machine runs smoothly.

1	
2	
3	
4	

Question 18. On a CNC what are External tooling and where are they kept?


Question 19. When running a CNC Programme the controller does not recognise a “word” and error occurs. What name is given to this error?

--

Question 20. Explain **any two** of the following terms in relation to High Speed Moulding.

Feed Speed:
Pitchmark:
Rear Pressure Shoe:

Question 21. In circular saw blade manufacturing what are expansion slots and how do the work?


Question 22. Fill in the names of each **Insect** in the statements given below:

The larvae of the \_\_\_\_\_ reduces wood to a fine powder if given enough time to feed.

\_\_\_\_\_ feed on damp or decaying wood and will also eat wood products such as cardboard and paper that have been infested with fungus.

\_\_\_\_\_ is responsible for 80% of woodworm damage to furniture and surrounding wooden flooring, skirting and architraves.

Question 23. Give 4 Safety Regulations that should be observed when using the Band Resaw:


Question 24. In relation to surface finishes (mainly spraying) answer the questions below:

a) What would be the cause of uneven coating of lacquer on the surface?
b) What type of finish should be used on baby's wooden toys?
c) What are Isocyanates?
d) What name is given to the fault that occurs when spraying lacquer in damp or humid conditions that results in a milky haze on the lacquered surface?

Question 25. Name three safety precautions to be observed when sanding on the lathe?


Question 26. Describe steps taken to treat and eradicate Dry Rot in a timber floor and joists of a ground floor building.

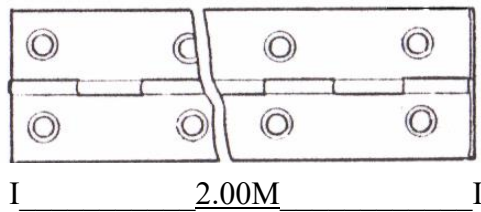

Question 27. Explain how timber preservatives work?


Question 28. What is the primary use of the profile grinder?


Question 29. Provide the correct machine that uses each of the following guards.

Bonnet guard	
Crown guard	
Bridge guard	
Shaw guards	

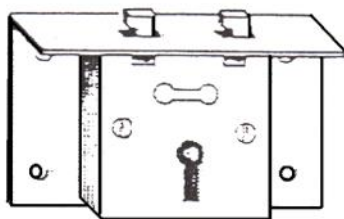
Question 30. Correctly name any two of the following and state where they are used.



1	



2	



3	