

CANDIDATE NAME

CANDIDATE No						
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The Institute Of Carpenters

FOUNDATION CERTIFICATE

Wednesday May 26th 2004

THEORY PAPER

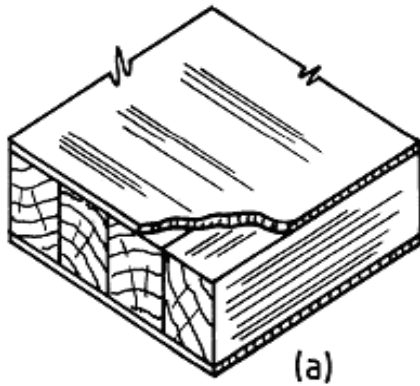
TIME ALLOWED ONE AND A HALF HOURS

**The following instructions should be read by ALL
CANDIDATES before they commence work**

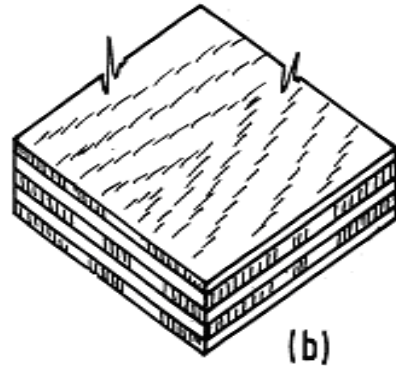
To obtain full marks Candidates must answer **ALL** questions
Answers **MUST** be submitted on the question paper
immediately below the question
Your candidate name and number **MUST** be written clearly in
the top right hand corner of this sheet

1. State on which type of door a "Tee hinge" would be fitted.

2. State the name given to the manufactured boards shown in figures 1a and 1b.



(a)



(b)

Figs. 1a & 1b

a
b

3. Name **TWO** grit materials used in the manufacture of abrasive papers.

4. State a material, other than floor boarding, that could be used as a floor covering to floor joists.

5. In roof construction, state where a Soffit Board would be used.

6. (a) Using drawing instruments, construct a right angled triangle whose base line and vertical line are both 70 mm long.
(b) Bisect the angle, using a compass, to give 45° .

7. State why step ladders need to be checked for damage prior to use.

8. Briefly explain the procedure of fixing plastic laminate to a wood based material using a contact adhesive in a well ventilated area with no naked flames.

9. State the title of **ONE** set of Regulations which are required to be displayed in a joinery workshop.

10. Describe the difference between a marking gauge and a mortice gauge.

11. List **FIVE** items of information which should be stated when ordering wood screws.

1.
2.
3.
4.
5.

12. Define the term "nominal" with regard to timber.

13. State **TWO** safety precautions to be observed when using electrically powered power tools.

1.
2.

14. State the type of joint used between the head and jamb of a door frame.

15. Name the item of hardware shown in figure 2 and state its use.

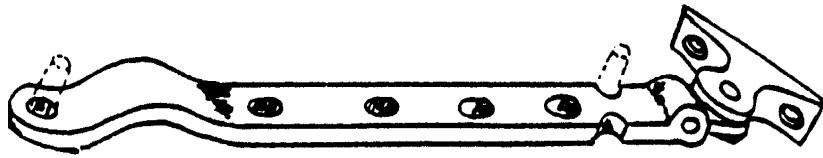


Fig.2

Name	
Use	

16. Give **TWO** reasons for the use of a wall plate laid and bedded to walls prior to laying floor joists.

1.	
2.	

17. Using notes and sketches, describe the difference between a Hipped ended and Gable ended roof.

18. Define with regard to formwork for concrete , the term "striking".

19. Explain the following terms :

(a) Stud partition; (b) Damp proof course.

(a)

(b)

20. State **TWO** precautions to be observed when using a chisel.

1.

2.

21. Sketch an oval nail and state **ONE** reason for using this type of nail.

22. Using notes and sketches, show how good quality timber, of equal thickness, should be stored prior to use.

23. Name the type of joint shown in figure 3.

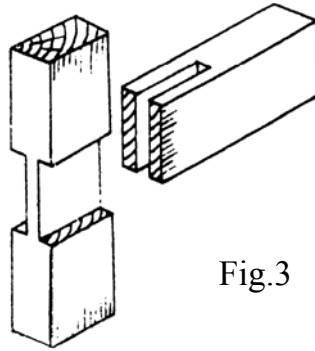


Fig.3

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24. Multiply 67×5 and divide your answer by 3.

$67 \times 5 =$	
$\div 3 =$	

25. Describe briefly the method of transferring a datum level to other points on a building site using a straight edge and a spirit level.

26. Describe a situation where a mortice latch lock would be used.

27. Sketch the following mouldings which may be used when manufacturing a panelled door.

(a) Stuck; (b) Planted.

28. With the aid of a sketch, describe **ONE** method of fixing a timber casement window frame during construction of the brickwork.

29. Describe the purpose of a skirting board stating where it would be used.

30. Using notes and sketches describe the use of a "Plumb-bob".

31. The theorem of Pythagorus is put to good use in roof construction. Given that half the span of a pitched roof is 8 m and the rise is 6 m, determine the length of the common rafter/spar.

Length of rafter/spar =	
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32. List the tools necessary to construct a dovetail halving joint using 50 mm x 18 mm prepared timbers.

33. Name the type of hand saw which is used to cut across the grain of a timber joist.

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34. Complete figure 4 to indicate which type of handcut joint would be used between the end panel and the top front rail of a free standing kitchen floor unit.

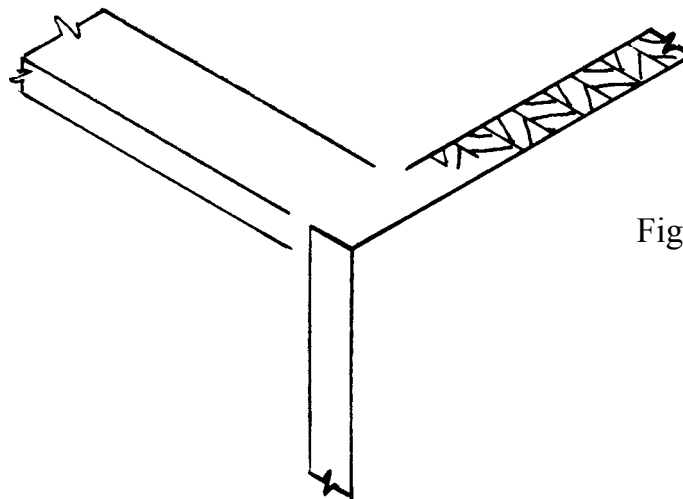


Fig. 4

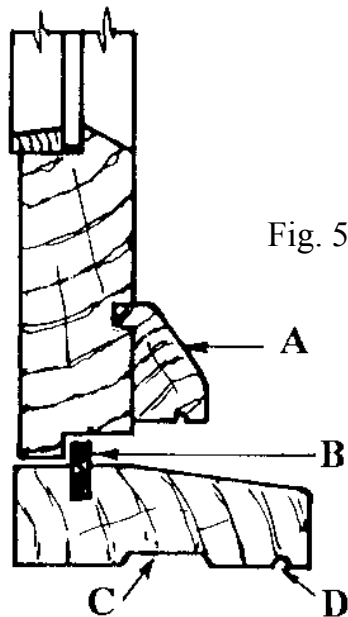
35. Apart from hard and softwood, list **FIVE** items which a timber supplier would normally be expected to stock.

1.
2.
3.
4.
5.

36. Name **ONE** type of common wood boring insect.

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37. Figure 5 shows the detail of a threshold under the bottom edge of an external door. Name each of the items indicated.



A
B
C
D
E

38. Sketch **TWO** methods of fixing a plywood back to a cupboard unit with solid sides.

39. State the angle of cut that is generally used on architraves when fitting around a door opening.

40. Sketch a section through the 100 x 63 rebated head of a door frame.