THE INSTITUTE OF CARPENTERS



Member Examination

13th June 2000

Associated Vocational Technology Paper Section A

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

Candidates are advised to spend **NOT more than 1 HOUR** on this section. Total time allowed for both papers A and B **THREE HOURS**

To obtain full marks Candidates must answer ALL questions which carry equal marks

Answers **MUST** be submitted on the question paper immediately below the question Your candidate number **MUST** be written clearly in the top right hand corner of this sheet

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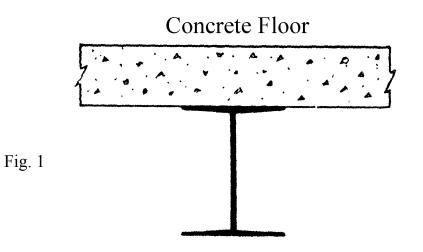
and all USED AND UNUSED PAPERS MUST BE RETURNED after the examination

TO BE COMPLETED BY CANDIDATE BLOCK LETTERS PLEASE

Name:												
Date of Birth:				R	egia	n						
Occupation:										A	ge	

 Describe the procedure for facing and edging a 2 m length of 100 mm x 50 mm sawn softwood on a surface planer clearly stating the current safety requirements.

2. A steel beam is shown in figure 1. Sketch how this could be enclosed using timber framing and plasterboard cladding.



3. Define **THREE** main objectives when writing a defects report.



- 4. Sash cords have to be replaced on both sashes in a double hung sash and cased window. State :-
 - (i) **THREE** components, apart from the sashes, which are removed from the case during the operation;
 - (ii) **ONE** aid used to assist threading the cord through the pulley wheels;
 - (iii) **ONE** method of attaching the cord to the sashes.

(i) 1.			
2.			
3.			
(ii)			
(iii)			

5. List **FIVE** headings that would be found in a door schedule.

1.	
2.	
3.	
4.	
5.	

- 6. a) Determine the number of full sheets of 2440 x 1220 hardboard to be ordered to cover the **TWO** sides of a 4000 long x 2440 high timber stud partition.
 - b) Calculate the cost of the hardboard when each sheet is priced at £6.28.

Number of sheets =

Cost of sheets =

- 7. (a) Explain the purpose of a datum line.
 - (b) Describe a method to establish this datum line at various positions within a building under construction.

(a)	
(b)	

- 8. Specify in detail with the aid of sketches, **TWO** of the following :-
 - (i) Strapping to brickwork;
 - (ii) Timber lining to ceilings and/or walls;
 - (iii) Plastic faced worktop to base unit.

9. List the tools and fixings required to fix a purpose made wall unit to a plastered brick wall.



- 10. A half hour fire check door is to be hung to a frame which has planted stops. State :-
 - (i) The minimum width of the stops;
 - (ii) The minimum thickness of the stops;

(iii) The method of fixing the stops to the frame.

(i)		
(ii)		
(iii)		

11. List the sequence of operations and choice when using electric hand power tools and jigs for the manufacture of a simple straight stair flight.

12. Figure 2 shows the graphical representation of concrete as recommended in BS 1192 Building Drawing Practice. Complete the boxes for the remaining materials.

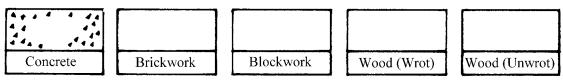


Fig. 2

13. Describe the uses of **FOUR** of the scaffolding components listed below.

Component	Use
Base plates	
Standards	
Transoms	
Ledgers	
Working platforms	
Braces	

- 14. In relation to timber drying, describe the following terms :-
 - (i) "Fibre saturation point";
 - (ii) "Oven dry weight";
 - (iii) "Moisture content".

(i)		
(ii)		
(iii)		

- 15. A trussed rafter roof is specified to cover a two storey domestic building. State how the trussed rafters are :-
 - (i) Raised by mechanical means;
 - (ii) Aligned to position on the roof;
 - (iii) Fixed in position.

(i)		
(ii)		
(iii)		

16. Complete the table below to illustrate how materials/components are protected from damage on site prior to fixing.

Materials/Components	Protection
Moulded Skirting	
Flush Doors	
Trussed Rafters	

- 17. An entrance door in a domestic building is to be manufactured in teak incorporating one large glazed engraved panel and a built up bottom rail.
 - (i) State the most efficient type of joint to use between the top rail and the stile;
 - (ii) Illustrate by means of a sketch a method of jointing two members to form a 450 mm wide bottom rail making a feature of the joint.

(i)	

(ii)

18. A plain door frame is to be fixed in the center of a one brick thick wall. The door is 2 m in height and the bottom of the door is to have a clearance of 20 mm from the floor which is sand/cement screed and will be laid later. A datum height of 1 m is marked on the brickwork at the opening. Describe the procedure for positioning and fixing the frame.

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