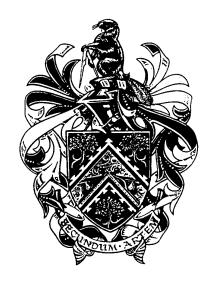
THE INSTITUTE OF CARPENTERS



Intermediate Examination

16th June 1998

Associated Vocational Technology Paper

TIME ALLOWED: 90 MINUTES

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

To obtain full marks Candidates must answer **ALL 20** questions All questions 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

This question paper remains the property of the **Institute of Carpenters**

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	egio	n						
Occupation:										A	ge	

1.	State the	use of the	following	hand	tools:-
			10110 11115	110110	COCID.

Tool	Use
Forstner bit	
Gouge	
Carpenters axe	

2. Place a tick under the given headings to indicate the correct function of the parts of a tree in the list below.

Function	Oldest Part of Tree	Maximum Growth Period	Protection	Forms Vertical Grain	Cell Growth
Bark					
Cambium Layer					
Heartwood					
Springwood					
Tracheids					

- 3. (a) State the studwork centres required for :-
 - (i) 9 mm plaster board;
 - (ii) 12 mm plasterboard.

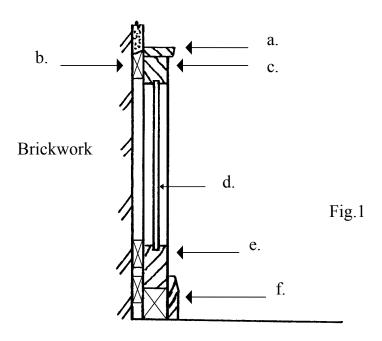
(i)			
(ii)			

- (b) List **TWO** advantages and **TWO** disadvantages of the following types of partitioning:-
 - (iii) Fixed partitions;
 - (iv) De-mountable partitions.

	Advantages	Disadvantages
(iii)	1.	1.
	2.	2.
(iv)	1.	1.
	2.	2.

4. Fig. 1 shows the vertical section through a dado panelling. Identify the parts indicated.





a.	b.
c.	d.
e.	f.

5. With regards to softwood flooring, sketch and describe **TWO** methods used to ensure tight fitting joints.

6. In the table below state **TWO** advantages and **TWO** disadvantages of using double glazing units in casement windows.

Advantages	Disadvantages
1.	1.
2.	2.

- 7. (a) State the use of a scale rule;
 - (b) State the true length of a 15 mm long line that has been drawn to a scale of 1:20;
 - (c) Complete the drawing at Fig. 2 to form the outline for a segmental arch.

a.	b.

	İ	Fig. 2
c.		8: -

- 8. Sketch and name the aids used for safe working when using any **TWO** of the following machines:-
 - (a) Circular Saw General use;
 - (b) Band Saw Cutting wedges;
 - (c) Planing Machine Planing short lengths.

(Calculate the floor area for a room which is 4200 long x 3500 wide adding 10%
-	
-	
_	
_	
	(a) Describe a method used to prevent the concrete from adhering to the
	formwork.
	(b) List the sequence of operations when striking the formwork from a simple cast in-situ beam.
	a.
-	
-	
=	
-	b.
-	
-	
-	
	Sketch TWO of the following details:-
	(a) A horizontal section through a door lining and part flush door;
	(b) A horizontal section through a door frame and part flush door;
	(c) The front elevation of a storey frame.

Marks

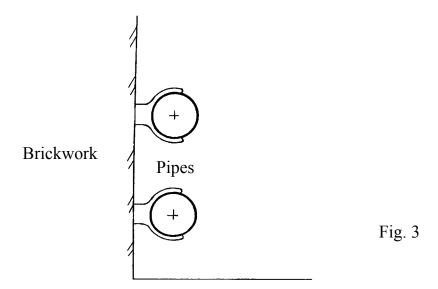
12.	Describe the	methods used	l to solve the	following	problems:-
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- (a) Loose and squeaky floorboards;
- (b) Kitchen units that have tight fitting drawers, without planing.

a.			

b.		

13. Complete Fig. 3 to show a method of boxing in existing pipework.



14. From the given list of portable power tools below, insert the correct power tool next to the operation.

Chop-Saw; Planer; Screwdriver; Drill; Cartridge Gun

Operation	Tool
Cutting mitre's on wood or metal	
Fixing plasterboard studwork to brickwork	
Fixing chipboard flooring	
Preparing the edges of MDF boarding in preparation for	

	With reference to safety in the use of access equipment state:-(a) The methods used to secure a ladder both at the top and the base;(b) The correct angle when using a ladder;(c) The formula used to determine the maximum platform height of a free standing internal mobile tower.
-	a.
-	b.
-	c.
	 (a) State TWO situations where a spirit level may be used; (b) Describe the methods used to ensure the vertical alignment of a door frame other than the use of a plumb level. (a) 1. 2
	2.
	(b)
	(b)

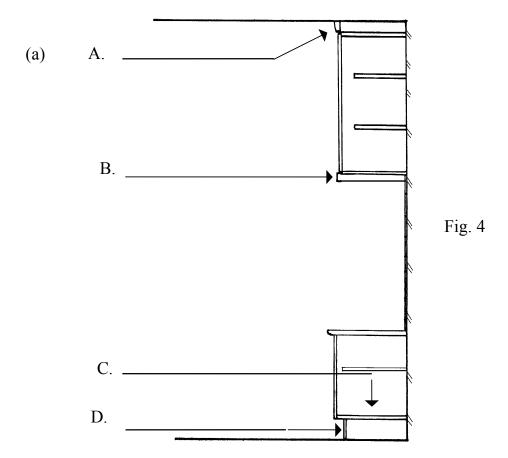
18.	In relation to the use of arch centres, describe the following:- (a) Why an arch centre is used; (b) The safe procedure for easing and striking the arch centre.	Marks
	a.	_
	b.	
		_
		_

- 19. Sketch part of a vertical section through a stairwell to show the following:-
 - (a) Floor trimmer; (b) Nosing; (c) Apron lining; (d) Ceiling finish;
 - (e) Floor covering; (f) Baluster.

20. Fig. 4 shows details of kitchen fitments.

(b)

- (a) Name the components indicated;
- (b) Describe the methods used for TWO of the following situations:-
 - (i) Levelling the base unit to an uneven floor;
 - (ii) Scribing the worktop to an uneven wall;
 - (iii) Adjusting the top unit for aligning the doors.



(i)		
(ii)		
(iii)		

AFFILIATE MEMBERSHIP

Affiliate membership of the Institute of Carpenters is available to candidates achieving success in the Institutes Intermediate examination, also to Teachers/Lecturers/Instructors of Woodcrafts possessing a trade background.

Further information and application forms may be obtained from

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