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**TIME ALLOWED ONE AND A HALF HOURS**

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[illegible]

1. Illustrate and describe where **TWO** of the following types of hinge would be used :-  
(i) Parliament hinge; (ii) Rising butt hinge; (iii) Flush/Hurlinge.
2. Figure 1 shows the part plan of a traditional sliding casement window. Name the parts indicated.

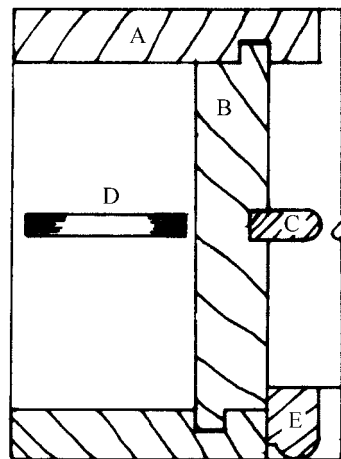


Fig.1

A
B
C
D
E

3. With the aid of sketches describe **THREE** defects which may occur when timber is seasoned.
4. State a type of personal protective equipment which should be used in each of the following situations :-

<b>Situation</b>	<b>Protective Equipment</b>
Operating a woodworking machine.	
Unloading timber from a delivery wagon.	
Drilling concrete.	
Using ballistic tools.	

5. Sketch the cross-section of a tree trunk, and indicate on the sketch the location, and the name of **FIVE** of its parts.

6. Figure 2 shows the vertical section through an internal door opening to a kitchen. Complete the drawing to show the methods used to suspend a sliding door.

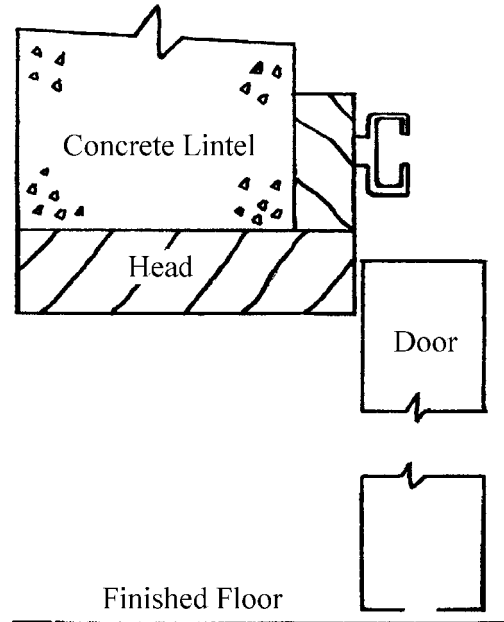


Fig.2

7. With the aid of sketches show horizontal sections through the **jamb**s of a traditional and a stormproof casement window. Also indicate materials sizes suitable for **single glazing**.
8. A room measures 9.650 m x 4.315 m and is covered with Tongued & Grooved (T&G) flooring. Calculate the area of the floor in m<sup>2</sup>, adding on 12% for waste.

Area of floor =	
+ 12% for waste	
<b>Total</b>	

9. Complete the table below to indicate where each of the types of adhesives listed may be used, and include **ONE** reason for your choice.

Adhesive	Situation Used	Reason
Polyvinyl Acetate		
Synthetic Resin		
Contact		

10. Complete Figure 3 to show the rear elevation of a 1982 x 762, ledged, braced and battened door. Indicate also the following :-  
 (i) Hanging side; (ii) The names and dimension for all the components.

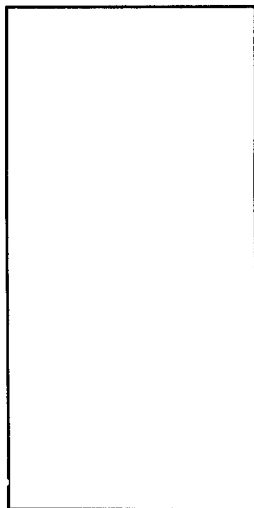


Fig.3

11. State a use for each of the materials listed in the table below.

Materials	Uses
Chipboard	
Medium Density Fibreboard	
Blockboard	
Plywood	
Hardboard	

12. The common furniture beetle (*Anobium Punctatum*) is the most widespread household wood boring pest in the U.K. Give **THREE** examples of identification of insect infestation.

1.

2.

3.

13. (a) Complete figure 4 to indicate the following :-  
(i) Nosing; (ii) Pitch Line; (iii) Margin; (iv) Rise; (v) Going.  
(b) State the formula used to determine the ideal ratio of the tread rise and going.

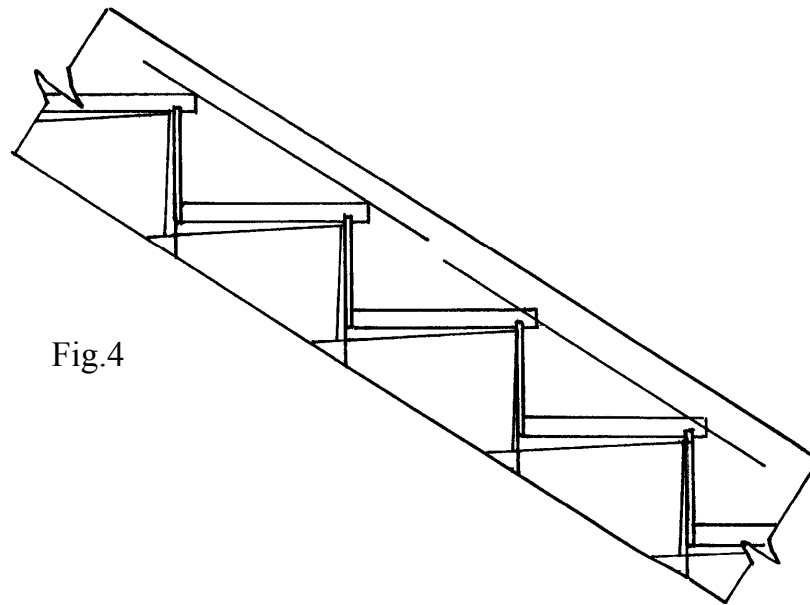
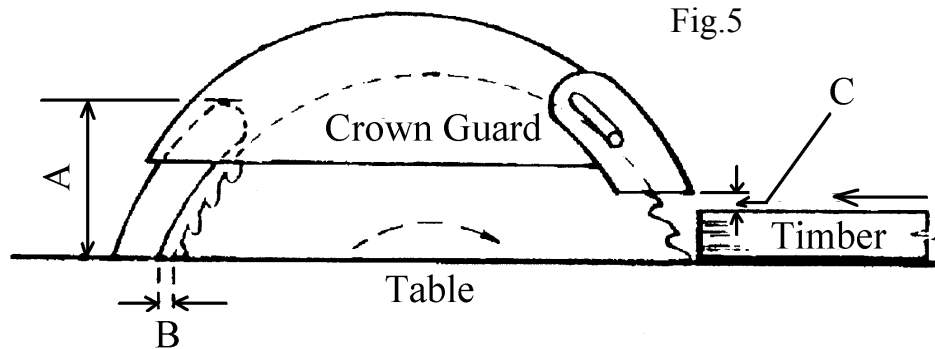


Fig.4

B.

14. Figure 5 illustrates the crown guard to a circular saw fitted with a blade of 650 mm diameter. Indicated in the box below, the dimensions necessary to comply with current Regulations.



A.	
B.	
C.	

15. Using sketches where necessary, describe methods of storage on site, **TWO** of the following materials :-
- (i) Plasterboard; (ii) 200 mm by 50 mm white pine flooring joists;  
(iii) Wall units; (iv) Flush panel doors.

16. (a) Describe 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 figure 6 to form the outline for a **segmental** arch.

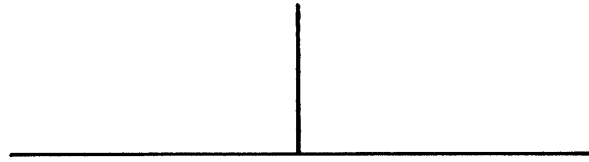


Fig.6

a.

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b.

17. Figure 7 shows a line diagram of the front elevation of a door frame and fanlight. On the drawing indicate the following parts:-  
 Jamb; Head; Cill; Transom; Horn.

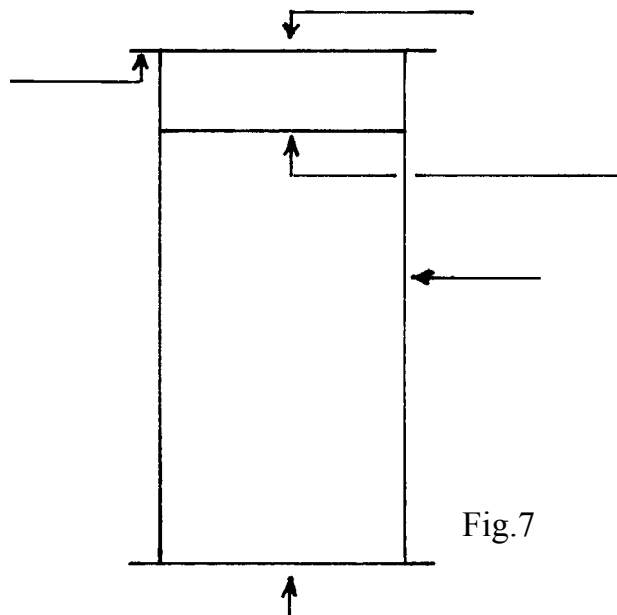


Fig.7



18. List the various portable electric tools that would be used for the different operations listed below.

Operation	Power Tools
Assembling the screwed sections of flat packed kitchen units	
Cutting laminate work top for inset sink	
Fixing wall units to a solid brick and plastered wall.	

19. Figure 8 shows the vertical section through an inverted concrete coping stone. Complete the figure to illustrate a mould box suitable to pre-cast the item.



Fig.8

20. (a) Figure 9 shows a plan view of a proposed upper floor with a fireplace opening. Using single lines, indicate on the drawing, the **Trimmer**, **Trimming** and **Trimmed** joists at the opening.

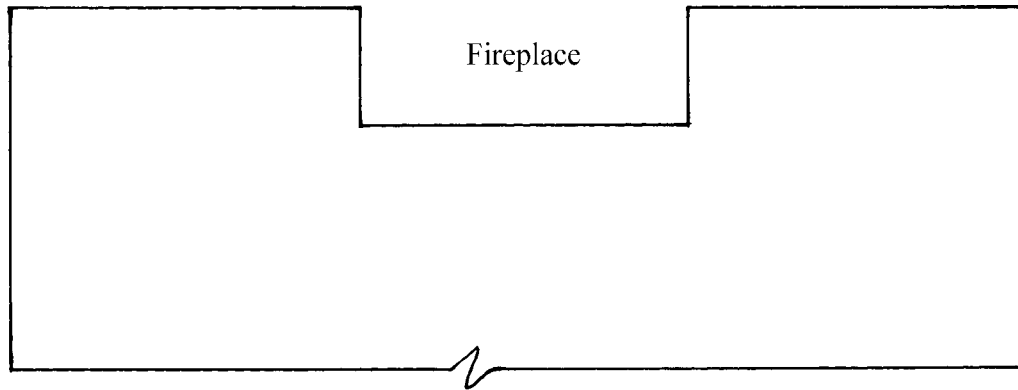


Fig.9

- (b) Using sketches, show **ONE** method of supporting the concrete hearth at the fireplace opening.