



Wednesday June 16th 2004

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

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

Name:
Date of Birth:
Occupation:

[illegible]

1. List **FIVE** items of ironmongery required to hang a hardwood front door, including **TWO** items for security.

1.	
2.	
3.	
4.	
5.	

2. Illustrate with sketches a type of hinge used on :-
(a) a traditional casement window; (b) a stormproof window.

3. List **THREE** advantages and **TWO** disadvantages of using cartridge operated (ballistic) tools.

Advantages

1.	
2.	
3.	

Disadvantages

1.	
2.	

4. (a) Figure 1 shows the section through the tread of an open riser stair.
- (i) State why the stair does not conform with the Building Regulations;

- (ii) Show on the diagram how this problem can be rectified.

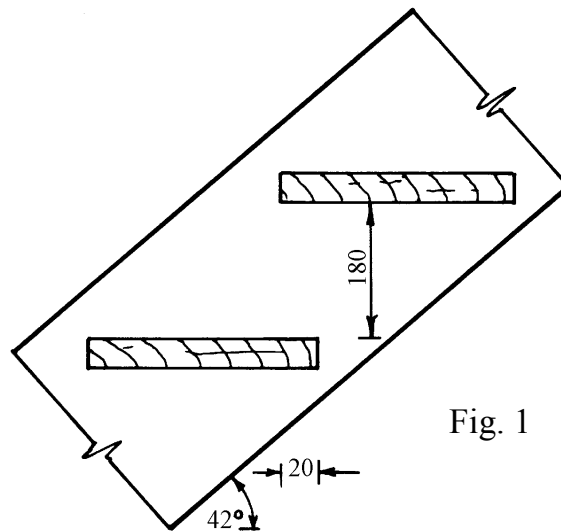


Fig. 1

- (b) Indicate on figure 2 the following :-
- (i) rise; (ii) going.

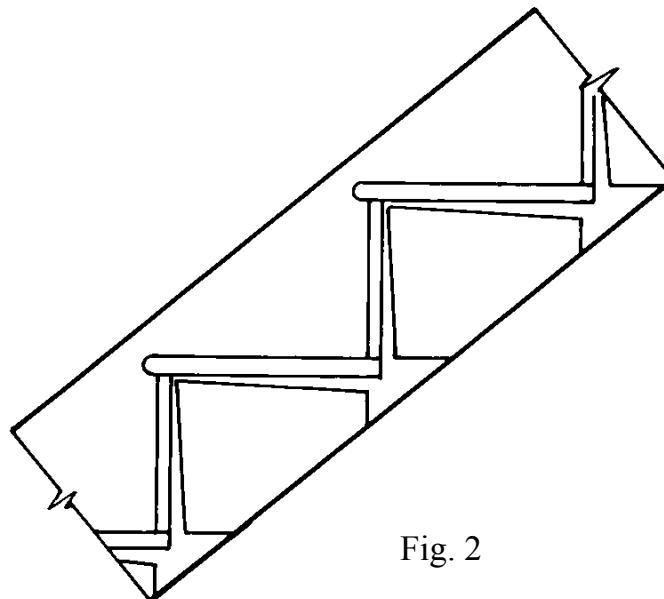


Fig. 2

5. Using notes and sketches describe **TWO** methods of secret fixing 1220 mm x 2440 mm x 18 mm oak veneered panels to a solid brick wall.
6. In conjunction with suspended ground floor construction, state the purpose of the following :-
- (a) D.P.C.; (b) Air Bricks; (c) Over-site Concrete;
(d) Honeycomb Sleeper wall.

a.

b.

c.

d.

7. (a) Complete figure 3 to illustrate **TWO** common methods of converting timber from the log to usable board sections.

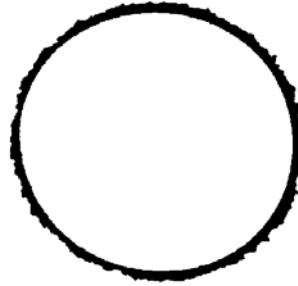
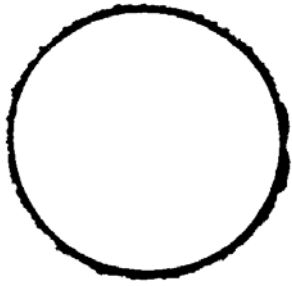


Fig. 3

- (b) Define the term "durability of timber".

8. State **FIVE** safety precautions to be observed in the use of portable powered hand tools in the workshop or on the site.

1.

2.

3.

4.

5.

9. (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.

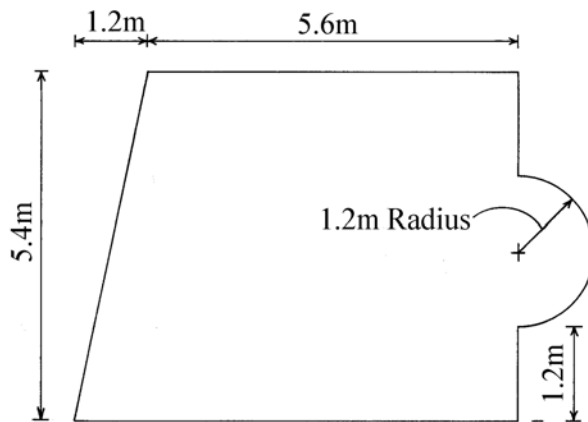
10. Figure 4 shows the plan of a room, the floor of which is to be laid with wood blocks. Calculate :-

- (a) The total number of square metres of wood block flooring required;
(b) The total cost of laying the wood blocks given a net cost per square metre of £23.50.

$$\pi = 3.142$$

$$\text{Area of a Circle} = \pi r^2$$

Fig. 4



Total number of square metres =	
Total cost of laying the floor =	


11. Describe with the aid of sketches the function or purpose of **THREE** of the following :-
- (a) Riving knife; (b) Bridge guard; (c) Ring fence;
(d) False fence; (e) Crown guard.

Item	Function or Purpose

12. Sketch horizontal sections through :-
- (a) The jamb and casement stile of a traditional window;
(b) The jamb and casement stile of a stormproof window.

13. Figure 5 shows the graphical representation of concrete. Complete the boxes for the remaining materials.

Concrete (given); Brickwork; Blockwork; Wood (prepared); Wood (sawn).

				
Concrete	Brickwork	Blockwork	Wood (prepared)	Wood (sawn)

14. Sketch **THREE** shelf supporting systems.

15. State **TWO** reasons for including a haunch on the joint between the stile and top rail of a panelled door.

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

17. Make sketches to show the construction of :-
- (a) Open sprocket eaves;
 - (b) Closed eaves.

18. (a) Describe the function of strutting to timber upper floors.

- (c) Sketch **THREE** types of strutting which may be used in timber upper floors.