

ST00051823 A3 PO4500131694 10347859

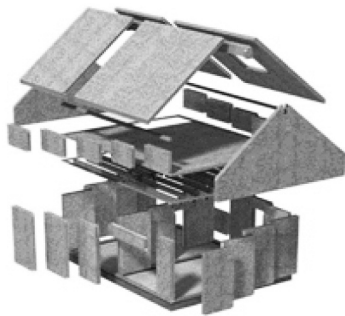
- 1 Identify **three** areas of the property market supported by the construction and built environment sector. (3 marks)

- 2 State **three** advantages of public housing. (3 marks)

- 3 Explain why the development of sustainable communities should include planning for open spaces. (3 marks)

- 4 Explain the importance of public transport systems within sustainable communities. (4 marks)

- 5 Identify the **three** modern forms of construction labelled a), b) and c) in Figure 1. (3 marks)



a)



b)



c)

Figure 1

- a) _____
- b) _____
- c) _____

6 Identify the type of material deterioration labelled a), b), c) and d) in Figure 2.

(4 marks)



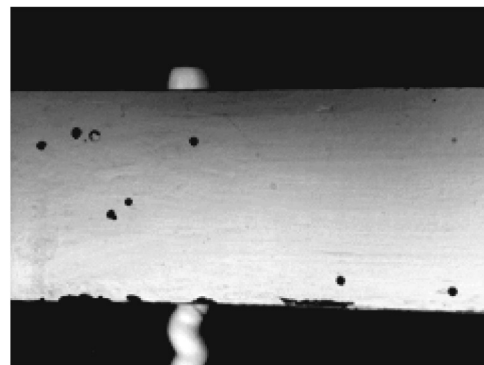
a)



b)



c)



d)

Figure 2

- a) _____
- b) _____
- c) _____
- d) _____

7 Describe how the following factors affect the design of the built environment.

a) Community needs. (2 marks)

b) Aesthetics. (2 marks)

c) Infrastructure requirements. (2 marks)

d) Environmental issues. (2 marks)

8 Explain the difference between concept drawings and detailed working drawings used in construction design and planning. (4 marks)

9 Explain how the following are used in building design.

a) Building Regulations Approved Documents.

(3 marks)

b) Building Information Modelling (BIM).

(3 marks)

10 a) Name **three** different types of drawings prepared by designers.

(3 marks)

b) Describe what is meant by the term 'annotation' as applied to construction drawings.

(2 marks)

- 11 The building shown in Figure 3 has dimensions on plan of 9 m x 5 m. The front and back walls are 4 m high and the gable end walls are 6 m high at the ridge. The gable walls are symmetrical.

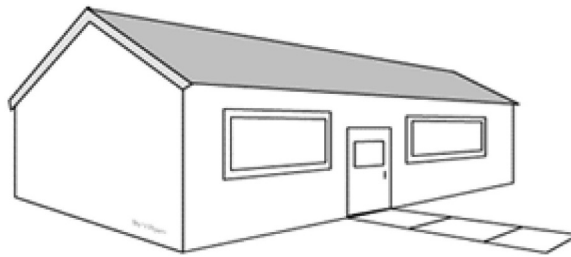


Figure 3

Determine the:

- a) area of gable end wall
- b) area of front and back walls
- c) internal volume of the building
- d) total surface area of the walls.

(2 marks)

(2 marks)

(2 marks)

(2 marks)

- You have been asked to communicate with the local authority to obtain planning permission for an alternative development. The developer will have to consider the design factors to be taken into account in any new proposal and will need to present another planning application.

(9 marks)

[illegible]