



General Certificate of Secondary Education
2024

Centre Number

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Candidate Number

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Construction and the Built Environment

Unit 1

Introduction to the Built Environment

MV18

[GCN11]

WEDNESDAY 29 MAY, AFTERNOON

Time

1 hour, plus your additional time allowance.

Instructions to Candidates

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

You must answer the questions in the spaces provided.

Do not write on blank pages.

Complete in black ink only.

Answer **all six** questions.

Information for Candidates

The total mark for this paper is 80.

Figures in brackets printed at the end of each question indicate the marks awarded to each question or part question.

Quality of written communication will be assessed in question **2(e)**.

1 (a) Describe what is meant by the term **built environment**.
[2 marks]

(b) The construction industry can be divided into three main activities. State each of these **three** main activities and describe each one with an example.
[1 mark for each activity, 3 marks for each description]

1. _____

2. _____

3. _____

2 **Fig. 1** and **Fig. 2** show a sectional view and photograph of a structure commonly used in the construction process. The Architect has appointed a Structural Engineer to design the structure.

Fig. 1

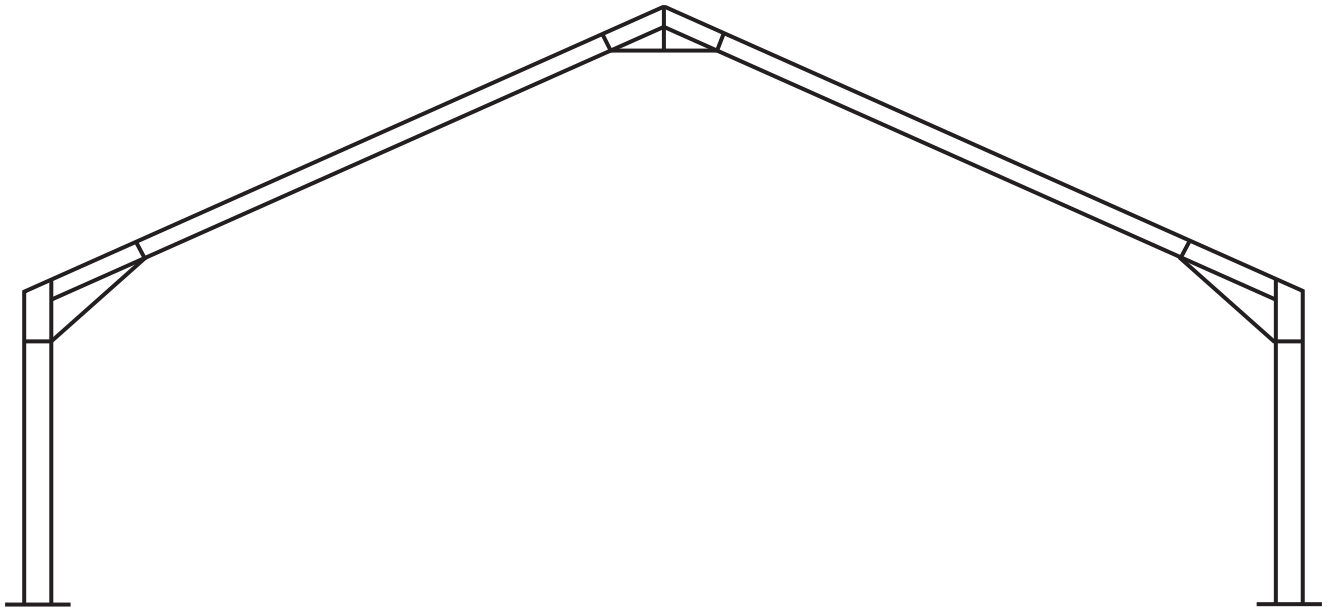


Fig. 2



(a) Name the type of structure shown in **Fig. 1** and **Fig. 2**.
[1 mark]

(b) List the **three most common** materials which this structure is normally manufactured from.
[1 mark for each]

1. _____

2. _____

3. _____

(c) State **two common** uses for this structure.
[1 mark for each]

1. _____

2. _____

(d) Describe the main role of the structural engineer in this project. [2 marks]

4 The construction industry is one of the most dangerous industries to work in. Each year there are many deaths and accidents. Health and Safety legislation has been introduced to keep workplaces and individuals safe.

(a) State the name of the Health and Safety legislation that has been introduced in Northern Ireland. [1 mark]

(b) This legislation creates duties for different groups of people. List **three** groups below. [1 mark for each]

1. _____

2. _____

3. _____

(c) Poor manual handling can cause many types of injury. List **three** below. [1 mark for each]

1. _____

2. _____

3. _____

(e) The current CDM Regulations require employers to carry out a suitable and sufficient risk assessment. Complete the risk assessment below for **three** hazards associated with working at height. [9 marks]

Risk Assessment						
Activity	Hazard	Persons exposed	Severity 3–major 2–serious 1–minor	Likelihood 3–highly likely 2–likely 1–unlikely	Risk 9–greatest 1–lowest	
Working at height						
Working at height						
Working at height						

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(Questions continue overleaf)

5 There are a variety of methods and materials used in the construction of buildings. Explain what is meant by the following terms. Each explanation should have at least **three** clear points/criteria. [3 marks for each]

(a) Softwood

(b) Hardwood

(c) Mortar

(d) Insulation

6 There are many types of buildings with different characteristics which surround us. List **two** building types that could be found in the following groups, explaining their main characteristics.

(a) State **two** commercial building types.

[1 mark for each]

1. _____

2. _____

(b) Describe the main characteristics of commercial buildings. [2 marks]

(c) State **two** community building types.

[1 mark for each]

1. _____

2. _____

(d) Describe the main characteristics of community buildings. [2 marks]

This is the end of the question paper

SOURCES

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Question Number	Marks
1	
2	
3	
4	
5	
6	
Total Marks	

Examiner Number

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