



General Certificate of Secondary Education  
2022

Centre Number

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Candidate Number

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# Construction and the Built Environment

Unit 1

Introduction to the Built Environment



[GCN11]

\*GCN11\*

TUESDAY 17 MAY, AFTERNOON

## TIME

1 hour.

## 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 outside the boxed area on each page or on blank pages.**

Complete in black ink only. **Do not write with a gel pen.**

Answer **all six** questions.

## INFORMATION FOR CANDIDATES

The total mark for this paper is 80.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

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



Answer **all** questions

1 A client has appointed an Architectural Technologist as the project leader for a **social housing development** of 20 semi-detached and 30 detached houses.

(a) State the **name and year** of the commonly used construction cycle the project leader will follow to ensure successful completion of this project.

\_\_\_\_\_ [2]

(b) List the **eight stages** of this construction cycle.

1. \_\_\_\_\_ [1]

2. \_\_\_\_\_ [1]

3. \_\_\_\_\_ [1]

4. \_\_\_\_\_ [1]

5. \_\_\_\_\_ [1]

6. \_\_\_\_\_ [1]

7. \_\_\_\_\_ [1]

8. \_\_\_\_\_ [1]

(c) Describe what occurs at the **last stage** of this cycle.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]



(d) Discuss **three advantages** of using such a cycle.

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

3. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

(e) State **two** of the main characteristics of a detached house.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

[Turn over



(f) Identify **three** of the main roles that an Architectural Technologist would have for the **social housing development**.

(i) \_\_\_\_\_

\_\_\_\_\_

(ii) \_\_\_\_\_

\_\_\_\_\_

(iii) \_\_\_\_\_

\_\_\_\_\_

[3]



2 Various construction methods could be used to construct a three-storey apartment block in a city centre location.

(a) The Quantity Surveyor would significantly contribute to this overall construction project. Identify **two** of the main roles of the Quantity Surveyor.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_

[2]

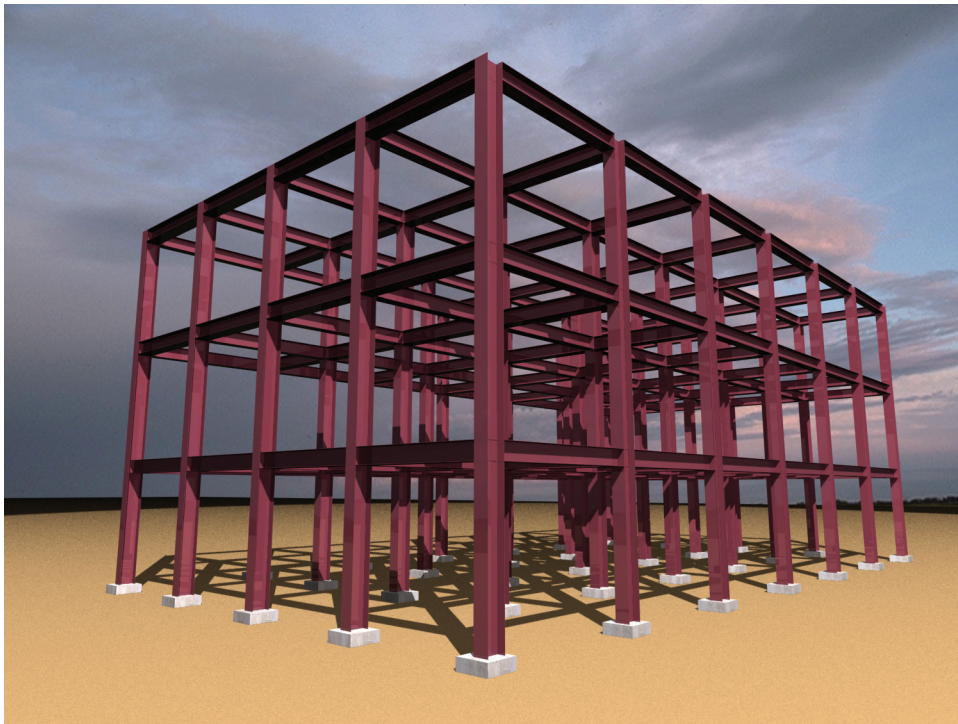


Fig. 1

(b) Identify the type of structure shown in Fig. 1 above which will be used for the construction.

\_\_\_\_\_ [1]

[Turn over







3 Labour is an important resource consideration which is required in order for a project to run efficiently. List **three** other resource considerations, explaining each, with an example.

1. \_\_\_\_\_ [1]

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [3]

2. \_\_\_\_\_ [1]

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [3]

3. \_\_\_\_\_ [1]

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [3]





4 Trussed roof construction is a common construction method.

(a) List **four** materials commonly found in this type of roof.

- 1. \_\_\_\_\_ [1]
- 2. \_\_\_\_\_ [1]
- 3. \_\_\_\_\_ [1]
- 4. \_\_\_\_\_ [1]

(b) Describe the term self-finish, stating an example.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ [3]

(c) Describe the term applied finish, stating an example.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ [3]



5 There are four main categories of safety sign that can be found on a construction site. A warning sign alerts you to a specific hazard. State **two** other types and describe the meaning and appearance of each:

1. \_\_\_\_\_ [1]

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ [2]

2. \_\_\_\_\_ [1]

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ [2]





**DO NOT WRITE ON THIS PAGE**

<b>For Examiner's use only</b>	
<b>Question Number</b>	<b>Marks</b>
1	
2	
3	
4	
5	
6	

<b>Total Marks</b>	
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**Examiner Number**

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