



8711-031 MONTH 2022

T Level Technical Qualification in Onsite Construction) (8711)

Onsite Construction Core (8711-30) – Theory exam (1) (8711-031)

If provided, stick your candidate barcode label here.

Date of exam (TBC)
Duration (2 hours)

Candidate name (first, last)

First [grid of 20 boxes]

Last [grid of 20 boxes]

Candidate enrolment number

[grid of 8 boxes]

Date of birth (DDMMYYYY)

[grid of 8 boxes]

Gender (M/F)

[grid of 2 boxes]

Assessment date (DDMMYYYY)

[grid of 8 boxes]

Centre number

[grid of 8 boxes]

Candidate signature and declaration*

[signature box]

- If additional answer sheets are used, enter the additional number of pages in this box.
• Before taking the examination, all candidates must check that their barcode label is in the appropriate box.
• Please ensure that you staple additional answer sheets to the back of this answer booklet, clearly labelling these with your full name, enrolment number, centre number and qualification number in BLOCK CAPITALS.
• All candidates need to use a black/blue pen. Do not use a pencil or gel pen, unless otherwise instructed.
• If provided with source documents, these documents will not be returned to City & Guilds, and will be shredded. Do not write on the source documents.

*I declare that I had no prior knowledge of the questions in this examination and that I will not divulge to any person any information about the questions.

General instructions

- Use black or blue ball-point pen.
• The marks for questions are shown in brackets.
• This examination contains 22 questions. Answer all questions.
• Answer the questions in the spaces provided. Answers written in margins or on blank pages will not be marked.
• Cross through any work you do not want to be marked.

The exam has been split into two sections.

Below details the types of questions and marks available for each section.

Please allow time for each section accordingly.

Section A is made up of 60 marks and includes 18 low tariff and medium tariff, short answer questions, which target recall of knowledge, demonstration of understanding and application of knowledge and understanding.

Section B is made up of 30 marks and includes 3 extended response questions, which target application of knowledge and understanding and analysis and evaluation of information and issues.



Section A

1 A construction operative is required to keep up to date with safety issues specifically related to working in construction.

State **two** types of CPD that could fulfil this.

(2 marks)

2 State **two** methods of tendering for a project.

(2 marks)

3 Name parts A and B of the foundation connection in Figure X.

(2 marks)

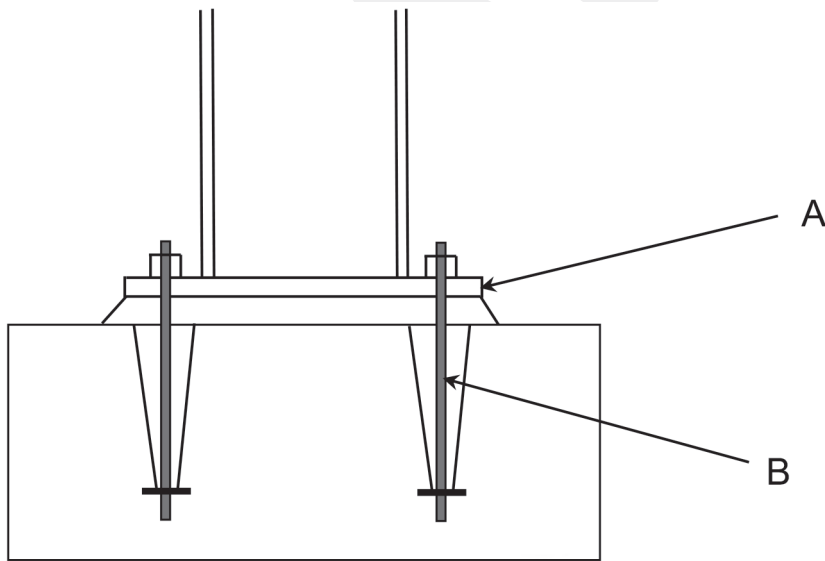


Figure X

4 Construction work can result in the production of waste materials that are considered to be hazardous and therefore require specialist measures when disposing of them.

Identify **three** materials where this is required.

(3 marks)

5 Give **three** examples of safe working procedures that aim to promote and support safety conscious behaviours within a construction environment.

(3 marks)

6 You are contracted to assist in the refurbishment of a Grade II listed building.

State the **two** main cost factors that would need to be considered during the planning and design stage of the refurbishment.

(2 marks)

7 Give **two** examples of the purpose of the Environmental Protection Act in dealing with controlled waste.

(2 marks)

8 Explain **two** responsibilities of a Local Authority Planning Officer once planning permission has been submitted.

(4 marks)

9 Explain **two** benefits of using Business Information Modelling (BIM) for teams working on the same project.

(4 marks)

10 Describe **two** methods of establishing whether a construction project requires building regulations approval.

(2 marks)

11 What advantages are there in using an integrated supply chain on construction projects?

(4 marks)

12 State **one** benefit of off-site construction. Give an explanation of your answer.

(2 marks)

13 A small domestic dwelling is to be built on land with a good bearing capacity.

Suggest the most suitable type of foundation that would be used for this project, giving a detailed explanation or your recommendation.

(6 marks)

- 14 A client has decided to build using structural insulated panels (SIPS) rather than more traditional methods of construction.

Explain the advantages of using this method.

(4 marks)

- 15 A ladder needs to scale a wall 8.3 m high and pass the top of the wall by a further 1 m.

Determine the **minimum** length of ladder required in order to maintain a correct ladder ratio.

(5 marks)

SAMPLE

16 Work needs to be undertaken on re-pointing a chimney at a residential property.

Explain the **five** steps required to produce a risk assessment for this work.

(5 marks)

17 Whist managing the design project of a new build plastics factory, you are directed to oversee the estimating and buying personnel.

Describe what key duties you would expect these members of the team to perform.

(4 marks)

18 A building has suspected asbestos in the walls, ceilings, and pipe insulation. The structure of the building needs to be partially demolished as part of the installation work of building services equipment, which includes the removal of the pipe insulation.

Explain what must be considered to deal with the hazard before work proceeds.

(4 marks)

SAMPLE

Section B

19 Analyse, using current examples, how PESTLE factors affect the residential sector. (9 marks)



SAMPLE

20 A client wants a two-storey extension constructed on the back of an office. The site has very easy access for materials and machinery. The main constraint is that the time allowed for the construction work on site, from commencement to handover, is extremely limited.

Discuss the construction method most suitable for this time constraint. (9 marks)

SAMPLE

21 A client wants to plan and develop sustainable offices for small business enterprises on a brownfield site surrounded by a mixture of residential and commercial properties.

Discuss the environmental performance measures that need to be considered during the design stage of this project to support the planning application to the local authority.

(12 marks)

Handwriting practice area consisting of 20 horizontal lines.

SAMPLE

This page is intentionally blank

SAMPLE

Published by City & Guilds
5–6 Giltspur Street
London
EC1A 9DE
centresupport@cityandguilds.com
www.cityandguilds.com

**City & Guilds is a registered
charity established to promote
education and training**

The T Level is a qualification approved and managed by the Institute for Apprenticeships and Technical Education.

Copyright in this document belongs to, and is used under licence from, the Institute for Apprenticeships and Technical Education, © 2022.

'T-LEVELS' is a registered trade mark of the Department for Education.

'T Level' is a registered trade mark of the Institute for Apprenticeships and Technical Education.

'Institute for Apprenticeships & Technical Education' and logo are registered trade marks of the Institute for Apprenticeships and Technical Education.