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6720-502 MARCH 2022
Level 2 Technical Award in Constructing and Maintaining the Built Environment

Constructing and Maintaining the Built Environment – Theory exam

If provided, stick your candidate barcode label here.

Wednesday 23 March 2022
09:30 – 11:30

Candidate name (first, last)

First

Last

Candidate enrolment number

Date of birth (DDMMYYYY)

Gender (M/F)

Assessment date (DDMMYYYY)

Centre number

Candidate signature and declaration*

- If additional answer sheets are used, enter the additional number of pages in this box. ➡ 0 0
- Before taking the examination, **all candidates** must check that their barcode label is in the appropriate box. Incorrectly placed barcodes may cause delays in the marking process.
- 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.**

You should have the following for this examination
- a pen with blue or black ink

General instructions
This question paper is the property of City & Guilds Limited and should be returned after the examination
- This examination contains **19** questions. Answer **all** questions.
- Answer the questions in the space provided.
- The marks for **each** question are shown in brackets.
- Cross through any work you do not want to be marked.

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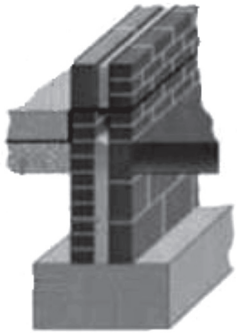
1 Other than new builds, identify **two** types of work carried out within the construction industry. (2 marks)

2 Explain why a Gantt chart is the **common** method used by site managers to communicate a programme of works. (3 marks)

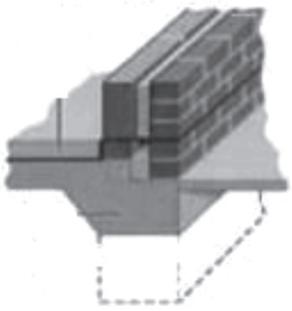
3 What name is given to short informal site meetings that focus on important safety issues? (1 mark)

4 Name **each** of the foundation types shown below. (4 marks)



Source: www.civilblog.org

a) _____

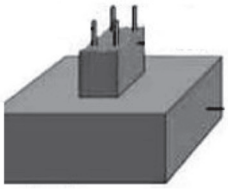


Source: www.civilblog.org

b) _____

Source: www.civilblog.org

c) _____



Source: www.civilblog.org

d) _____

5 Foul water drainage and surface water drainage have been deemed inappropriate to solve the problem of the water-logged pitch shown in **Figure 1**.

What type of drainage should be used? (1 mark)

Source: www.flickr.com

Figure 1

6 Explain **one** advantage and **one** disadvantage of choosing a cast in-situ solid concrete ground floor slab rather than a suspended beam and block floor. (4 marks)

7 Describe **two** reasons why domestic properties are **not** usually finished with an external render. (4 marks)

8 Identify **three** carpentry tasks that would be carried out during first-fixing. (3 marks)

9 Identify **two** desirable properties of a Class A Engineering brick. (2 marks)

10 Explain what is meant by the term 'building obsolescence'. (2 marks)

11 Identify **two** factors that can result in a building needing to be repaired. (2 marks)

See next page

12 Describe **two** advantages of planned building maintenance. (4 marks)

13 Name **three** elements of the superstructure that **must** be inspected during a condition survey. (3 marks)

14 Identify **three** common defects that may be found on a poorly maintained pitched roof. (3 marks)

15 Identify **three** tasks carried out by a painter and decorator on a new housing project. (3 marks)

16 a) Explain the purpose of a 'method statement' in a construction project. (2 marks)

b) How does a method statement impact on the safe running of a site? (3 marks)

17 Identify **three** key personnel with legal responsibilities under the Construction Design and Management (CDM) Regulations. (3 marks)

18 Other than safety footwear, high viz and hard hat, name **two** items of Personal Protective Equipment (PPE) that may be used by a carpenter when second fixing a house. (2 marks)

See next page

19 A semi-detached house is being altered to provide a full height extension to the left-hand gable wall. It will run in line with the front elevation and include an integral garage with access from the front, a utility room and two bedrooms above the garage, as shown in **Figure 2**.

Discuss the factors that should be considered before commencing construction. (9 marks)

Source: www.cliveemson.co.uk

Figure 2

See next page

End of examination