

073205T4BLD

BUILDING TECHNOLOGY LEVEL 6

CON/OS/BUT/CR/08/6

Printed By Technical And Vocational College

Execute Building External works

November/December 2025

Printed By And Vocational College Date: 20.11.2025 07:47 AM



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**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

WRITTEN ASSESSMENT

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TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATE

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1. This paper consists of **TWO** sections: **A** and **B**.
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2. Answer **ALL** questions in section A and **ANY THREE** (3) questions in section B.
3. Marks for each question are indicated in the brackets.
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4. Candidates are provided with a separate answer booklet
5. Do not write on the question paper.

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This paper consists of THREE (3) printed pages

Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing.

SECTION A (40 MARKS)

Answer ALL the questions in this section.

1. Landscaping ground is prepared as per design specifications. List TWO benefits of ground preparation before landscaping. (2 Marks)
2. Proper surface drainage is essential when laying external paving. State FOUR reasons for providing falls when preparing a paving base. (4 Marks)
3. Efficient irrigation is key to maintaining healthy soft landscapes. List THREE site factors that may influence the choice of irrigation method in soft landscaping. (3 Marks)
4. Excavation for drainage systems near existing utilities requires extra precautions. List THREE precautions to take when excavating drainage channels near existing services. (3 Marks)
5. Inspection chambers are vital in a drainage system. Mention FOUR benefits of constructing inspection chambers. (4 Marks)
6. Leveling dust is often used for surface preparation. State TWO factors that should be considered when spreading leveling dust on a site. (2 Marks)
7. Pavements surfaces are designed to support the movement of pedestrians, vehicles, or machinery. List any FOUR materials used in paving. (4 Marks)
8. Various factors influence the selection of fence type to use. Identify FOUR factors to consider when choosing a fence. (4 Marks)
9. Manholes are strategically located within drainage systems. Outline any THREE functions of manholes in a drainage system. (3 Marks)
10. Perimeter fencing is a type of external work. Outline functions of a perimeter fence on a construction site. (4 Marks)
11. A number of aspects are considered in the design of a drainage system. State FOUR factors to consider in selection. (4 Marks)
12. Open drainage channels are used for directing surface runoff in a built environment. State THREE regular maintenance practices performed on open drainage channel. (3 Marks)

SECTION B: (60 MARKS)

Answer THREE Questions in This Section

13. As a building tech you have been commissioned to execute soft landscaping works for the newly constructed hospital compound.

- Discuss SIX types of beautification materials you would include in the project. (12 Marks)

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b. Explain FOUR round irrigation methods you would use to ensure the survival of the beautification materials. (8 Marks)

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14. A newly built shopping complex has been experiencing flooding in its parking area during heavy rains. As the project supervisor, you have been tasked with overseeing the installation of a new drainage system to solve the problem.

- Describe the procedure of laying drainage pipes. (12 Marks)
- Discuss any FOUR types of collection chambers that can be used in the water management system. (8 Marks)

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15. Design and installation of a perimeter fence is an essential step in securing a newly constructed residential estate.

- Describe any FIVE factors to be considered in the design and installation of perimeter fencing. (10 Marks)
- Explain any FIVE types of perimeter fences. (10 Marks)

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16. Ishmael, a site supervisor is overseeing external paving works at a commercial com

- Describe to him the procedure for external paving. (10 Marks)
- Explain to him how slope analysis is performed during a topographic survey for paving. (10 Marks)

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