

073106T4QSV

QUANTITY SURVEY LEVEL 6

ENG/OS/QS/CC/05/6

Execute Building Temporary Works

March/April 2026



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

WRITTEN ASSESSMENT

Time: 2 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of **TWO** sections: **A** and **B**.
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.
4. Candidates are provided with a separate answer booklet
5. Do not write on the question paper.

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 questions in this section

1. Removing temporary structures requires careful planning to avoid accidents or structural damage. State FOUR safety precautions to observe when dismantling scaffolds. (4 Marks)
2. Before pouring concrete, supervisors are required to carefully check formwork systems to confirm that they meet design and safety requirements. List FOUR defects observed during formwork inspection. (4 Marks)
3. Some structures require temporary support to prevent failure during alteration or repair works. State FOUR situations where building shoring may be required. (4 Marks)
4. Different building works require different forms of access and working platforms. Identify FOUR types of scaffolds used on construction sites. (4 Marks)
5. Safe scaffold erection depends on the proper assembly of its main structural components. Identify FOUR main components of a typical scaffold system. (4 Marks)
6. To achieve quality concrete finishes, formwork must satisfy performance requirements. State FOUR requirements of good formwork for concrete works. (4 Marks)
7. Temporary molds are required to support and shape fresh concrete before it hardens. List FOUR materials commonly used for constructing formwork. (4 Marks)
8. Trench timbering must be designed based on conditions existing on the site. Identify FOUR factors that influence the method of trench timbering to be used. (4 Marks)
9. Work inside trenches exposes workers to risks that must be controlled using appropriate personal protection. State FOUR personal protective equipment required for trench timbering works. (4 Marks)
10. Before constructing trench supports, the materials and tools to be used must be carefully identified. List FOUR materials or tools used in trench timbering operations. (4 Marks)

SECTION B (60 MARKS)

Answer THREE questions in this section

11. Formwork systems are used to shape and support fresh concrete and must be properly erected and removed to ensure safety and quality. The quality of cast concrete depends greatly on how formwork is selected, erected, maintained and dismantled.
 - a. Explain FIVE requirements of good formwork for concrete works. (10 Marks)
 - b. Describe the procedure for erecting formwork for a beam or slab as per drawings and specifications. (10 Marks)
12. Shoring systems are used to carry loads temporarily until permanent structural support is restored or installed.
 - a. Describe FOUR types of shoring used in building works and state one application for each. (12 Marks)
 - b. Explain FOUR factors to be considered when selecting materials for building shores. (8 Marks)
13. Excavation activities require appropriate trenching to prevent collapse and ensure safe working conditions. When working in trenches, correct construction and dismantling procedures must be followed to prevent collapse and accidents.
 - a. List FOUR safety measures that must be observed when working inside a timbered trench. (6 Marks)
 - b. With the aid of a well labelled sketch, describe the procedure for constructing trench timbering in loose soils of a depth of 1.5m. (10 Marks)
 - c. Explain TWO considerations to observe when dismantling trench timbering during excavations. (4 Marks)
14. Scaffolds provide access and working platforms at height and must be erected and dismantled according to safety and design requirements. Incorrect scaffold installation can lead to serious accidents, so proper erection and dismantling steps must always be followed.
 - a. Describe the steps involved in erecting a steel scaffold on a construction site. (10 Marks)
 - b. Outline the steps involved in dismantling scaffolds after completion of work. (10 Marks)