

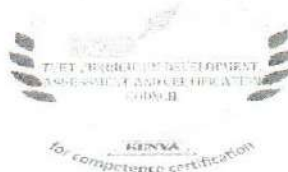
073206T4BLD

BUILDING TECHNOLOGY LEVEL 6

CON/OS/BUT/CR/11/6/A

Supervise Construction Project

March/April 2025



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

WRITTEN ASSESSMENT

Time: 3 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of **TWO** sections: **A** and **B**.
2. Attempt **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 FOUR (4) 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)

Attempt ALL the questions in this section

1. A construction site comprises of various items, personnel and activities. What is the purpose of the following on a construction site:
 - a) Quantity surveyor. (2 Marks)
 - b) Supervisory staff. (2 Marks)
2. A Schedule of Works is a contract document that lists the works required on a project. List FOUR importance of scheduling in construction projects. (4 Marks)

Minimises time wastage
Establish Project duration
Minimises delays
3. Monitoring is done to maximize on efficiency. State FOUR benefits of monitoring construction activities on the site. (4 Marks)

Avoids Collisions
ensured compliance
Promote safety | *High quality output*
Avoid absenteeism
4. Bill of quantities assists tenderers in the calculation of construction costs for their tender. Give FOUR disadvantages of using Bill of Quantities. (4 Marks)

Poor quality material selection | *mismatch of material cost*
Poorly estimated rates
inappropriate description
5. For the success of a project, roles and responsibilities are allocated. Name FOUR advantages of identifying project roles and responsibilities in managing projects' human resources. (4 Marks)

Minimizing delays
avoiding collisions
satisfaction of workers
6. Factors determining employees' salaries and wages should be both fair to employees and employer. List FOUR factors that determine remuneration. (4 Marks)

worker output | *remuneration policies*
Project budget
size of a firm
7. A building project has various stages. Differentiate between inception stage and conception stage as used in building construction. (4 Marks)

Inception - a picture of client in mind
conception - actualizing picture in form of a drawing
8. Construction projects are made possible by various resources. State FOUR resources. (4 Marks)

Labour | *material*
equipment | *finance*
9. A site layout helps in organizing the site. Identify any FOUR factors considered in preparation of a construction site layout. (4 Marks)

site activities
Location | *Efficiency of the site layout*
10. Work planning is used to guide workers in a construction site and gives direction of work. List any FOUR advantages of network planning. (4 Marks)

Easy flow of activities
Minimal time wastage
Reduced material delays
Timely Project Completion



SECTION B (60 MARKS)*Attempt Any THREE Questions in This Section.*

11. A project monitoring report provides information to assist stakeholders in comparing performance against plans so that current or potential problems can be identified and analyzed.

- a) Explain THREE most widely used tools for project monitoring. (6 Marks)
- b) Outline SIX uses of a project monitoring report. (6 Marks)
- c) Discuss FOUR limitations of a project monitoring report. (8 Marks)

12. The table below shows the activities and durations during the construction of a proposed entertainment hall.

- a) Prepare the network diagram. (14 Marks)
- b) Show the critical path. (2 Marks)
- c) What is the contract duration? (2 Marks)
- d) How many float days are there? (2 Marks)

S/NO	Activity	Duration (days)
1.	1-2	10
2.	1-3	11
3.	2-5	9
4.	2-7	12
5.	3-4	6
6.	3-6	6
7.	4-5	7
8.	5-6	8
9.	5-7	10
10.	6-7	6
11.	7-8	14

13. Costs incurred in a construction site and rates are inserted against the items as per building standard costing rates and site location.

- a) Explain the steps involved in cost estimation for a construction project. (8 Marks)
- b) Discuss THREE benefits of contingency planning in project cost estimation. (6 Marks)

c) Describe THREE factors that may necessitate the inclusion of contingencies in a project's budget. (6 Marks)

14. A project's scope of work is determined as per the project documents and records are maintained to monitor progress.

a) Explain FOUR benefits of maintaining site records in construction project management. (10 Marks)

b) Discuss FIVE potential challenges and risks associated with relying solely on building standard costing rates without considering site location in construction cost estimation. (10 Marks)

