

**073105T4PLM**

**PLUMBER LEVEL 5**

**CON/OS/PL/CR/07/5**

**Install Fire Control Systems**

**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**

**Candidate 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. Many fires start as a result of poor housekeeping, not only in the home but in many supposedly fireproof structures. State FOUR major causes of electrical fires. (4 Marks)
2. The wear and tear on a hose may be reduced to a minimum by proper care and handling. Outline FOUR ways of handling a hose reel. (4 Marks)
3. A project estimates establishes a budget within available funds. Outline FOUR factors that increase the cost of a fire protection system installation. (4 Marks)
4. A section of your institution building got fire. As a fire fighter, outline FOUR situations on when to fight it. (4 Marks)
5. Three elements must be present for a fire to exist. Identify FOUR sources of ignition of fire. (4 Marks)
6. Different types of extinguishers may be used in case of fire. List FOUR characteristics of wet chemical extinguisher. (4 Marks)
7. You found a fire hose neatly stored but with its nozzle left attached and slightly muddy. Outline FOUR maintenance checks you will carry out on the nozzle. (4 Marks)
8. A working drawing is very essential while installing fire control system. State any FOUR key elements to consider when preparing working drawings for a fire control system. (4 Marks)
9. It is important to properly maintain fire control equipment. State FOUR primary risks of using an adjustable wrench instead of the correct fixed-size spanner on a fire system valve. (4 Marks)
10. Red pipes in fire sprinkler systems are most commonly made of galvanized steel. Name FOUR reasons for using steel. (4 Marks)

## SECTION B (60 MARKS)

Answer any **THREE** questions in this section.

11. Implementing a fire control system requires strict adherence to housekeeping protocols to prevent accidents and ensure the system's reliability.
  - a) Explain FIVE housekeeping practices for installation of fire control system. (10 Marks)
  - b) Explain FIVE ways of storing flammable materials on site. (10 Marks)
12. You have been appointed as fire safety officer in your institution.
  - a) Describe FIVE different fire control equipment you should see stating their primary function. (10 Marks)
  - b) Explain FIVE testing protocols followed after installation of a fire hydrant. (10 Marks)
13. ABC Logistics is a warehouse storing a mixed inventory of packaged food, paper goods, and non-flammable plastics. A near-miss incident occurred when the warehouse went ablaze.
  - a) Explain FIVE possible incidents that could have sparked the fire. (10 Marks)
  - b) Describe FIVE practical, actionable measures to address the specific causes you listed. (10 Marks)
14. Installation of a fire hose reel system requires precision to ensure it is both accessible during emergencies and compliant with safety standards.
  - a) Explain FIVE standard considerations that are essential before its installation. (10 Marks)
  - b) Describe FIVE components of a hose reel system that need to be installed. (10 Marks)

**THIS IS THE LAST PRINTED PAGE**