

071906T4AEN

Agricultural Engineering Level 6 ENG/OS/AGR/CR/09/6/

And Vocational College

Date: 05.08.2025 10:39 AM

Manage Agricultural Engineering and Related Project**July /August 2025**

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

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WRITTEN ASSESSMENT

Time: 3 HOURSPrinted By And Vocational College Date: 05.08.2025 10:39
AM

INSTRUCT CANDIDATE

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1. This paper consists of TWO sections: A and B.

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2. Attempt ALL questions in section A. Question TWELVE (12) is COMPULSARY and any Other TWO (2) questions in section B.

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3. Marks for each question are indicated in the brackets.

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4. Candidates are provided with a separate answer booklet

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5. Do not write on the question paper.

This paper consists of FOUR (4) printed pages

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**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.**

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SECTION A (40 MARKS)

1. A project manager has to play various roles during his tenure. Outline THREE challenges a project manager may face while performing the roles. (3 Marks)
2. Many of the peril and result either in closure before completion or create problems. List FOUR reasons that can result into project failure before completion. (4 Marks)
3. As a manager implementing a new project, your organization project may not be having all the required skilled personnel. Outline THREE advantages of outsourcing skilled personnel from other organizations. (3 Marks)
4. A feasibility study is an investigation carried out during planning to determine the potential outcome or viability of a project. State FOUR reasons why one should carry out feasibility study. (4 Marks)
5. Records are written documents which are related to the activities of the project, kept for FOUR benefits of records to the achievement of project objectives. (4 Marks)
6. Project evaluation is an assessment of the project during the course of implementation. Outline FOUR reasons for carrying out project evaluation. (4 Marks)
7. Reporting refers to pulling together the data collected, distilling the findings in light of the questions the evaluation was originally designed to address, and disseminating the findings to projecters. State THREE reasons why it is necessary. (3 Marks)
8. The success of a project is the ultimate goal of donors and project implementers. Outline THREE parameters that one would use to judge that an agricultural project is successful. (3 Marks)
9. An organization undertaking engineering project hired a project manager. Outline FOUR duties that the project manager is expected to undertake. (4 Marks)
10. Human resource management is one of the key responsibilities of Agricultural project management. Outline FOUR considerations you would make as a manager when delegating duties to project staff. (4 Marks)
11. Project organization structure refers to the classification of workers based on their functional roles and departments. Outline FOUR factors considered in choosing a project organization structure. (4 Marks)

B (60 MARKS)

Attempt question F W E L V E (12) COMPULSARY and any other two Questions in this section

12. Agri-Tech Solutions, an innovative agricultural development company, launched a transformative project aimed at enhancing irrigation systems for smallholder farmers in the semi-arid regions. The primary objective of the initiative was to increase food security and improve crop productivity through the a solar-powered drip irrigation system, which promised efficient water use and continuous farming potential. The project was designed in response to persistent challenges in the region, including unpredictable rainfall patterns, prolonged droughts, and low agricultural output that often led to food shortages and economic instability among rural communities. By introducing renewable energy solutions, the project also aimed to promote sustainable farming practices and reduce dependency on rain-fed agriculture.
- The initiative was structured into several phases to ensure systematic execution and active participation of the target community. The project was funded by an international donor, which imposed the need for strict adherence to project timelines, reporting requirements, and budget limitations. Success depended on risk management, stakeholder coordination, and ongoing monitoring and evaluation to ensure both short-term impact and long-term sustainability.

SIX responsibilities expected of a project manager in this project.

(6 Marks)

- b. Describe FOUR models of training that will be applied when training the farmers involved. (4 Marks)
- c. Discuss FIVE in project management. (10 Marks)

13. A project budget is a detailed financial plan that outlines the estimated costs with all the tasks and activities required to complete a project.

- a. Explain FIVE importance of a budget in Project management. (10 Marks)
- b. Outline FIVE steps in preparing a project budget. (5 Marks)
- c. Agricultural project activities require funding to facilitate the various processes. State FIVE sources of funds a manager can use to finance the projects. (5 Marks)

14. The project life cycle refers to stages of activities that a project undergoes to completion.

a. Outline FIVE characteristics of a good project for implementation.

(5 Marks)

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b. Explain FIVE major phases of project implementation

(10 Marks)

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c. Describe FIVE characteristics of a good project manager.

(5 Marks)

15. The project life cycle refers to stages of activities that a project undergoes to completion.

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a. Explain the five major phases of project implementation

(10 Marks)

b. Agriculture Project management requires various functional skills throughout the project lifecycle. Explain FIVE of such skills.

(10 Marks)