THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL

DIPLOMA IN TECHNICAL EDUCATION EXAMINATION

783 **BUILDING CONSTRUCTION**

Time: 3 Hour. **Tuesday, 08th May 2001 p.m.**

Instructions

1. This paper consists of sections **five (5)** questions.
2. Answer all questions.
3. Each question carries **twenty (20)** marks.
4. Non-programmable calculators may be used.
5. Communication devices and any unauthorized materials are **not** allowed in the examination room
6. Write your **Examination Number** on every page of your answer booklet.

1. (a) Define foundation and explain its purpose in building construction.

   (b) (i) State three types of shallow foundations used in low-rise buildings.

   (ii) Give two factors that influence the choice of foundation type.

   (c) Mention three effects of using an unsuitable foundation for a building project.

2. (a) What is formwork in construction?

   (b) (i) Identify four properties of good formwork material.

   (ii) State two reasons why proper formwork removal timing is important.

   (c) Explain three challenges commonly encountered in formwork installation on site.

3. (a) Explain the importance of site clearance before commencing building works.

   (b) (i) List three tools used during site clearance.

   (ii) Give two environmental considerations during site clearing.

   (c) Describe three risks associated with poor site clearance practices.

4. (a) Define the term “construction contract.”

   (b) (i) Name three types of construction contracts used in the building industry.

   (ii) Give two advantages of using written contracts in construction.

   (c) Explain three problems that may arise when a project is started without a formal contract.

5. (a) What is scaffolding?

   (b) (i) Mention four essential parts of a typical scaffold.

   (ii) List two safety precautions to observe when using scaffolding.

   (c) Describe three possible consequences of unsafe scaffolding on construction sites.