THE UNITED REPUBLIC OF TANZANIA NATIONAL EXAMINATION COUNCIL DIPLOMA IN TECHNICAL EDUCATION EXAMINATION

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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.