THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL

DIPLOMA IN TECHNICAL EDUCATION EXAMINATION

783 **BUILDING CONSTRUCTION**

Time: 3 Hour. **Tuesday, 18th May 2010 a.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 the term “reinforced concrete” and explain its advantage over plain concrete.

   (b) List three common defects that may occur in reinforced concrete structures.

   (c) Mention three causes of cracking in reinforced concrete beams.

2. (a) State four reasons why supervision is important during construction activities.

   (b) Explain three duties of a site supervisor on a building project.

   (c) Give three challenges that site supervisors may face during project execution.

3. (a) Explain the importance of soil testing before starting foundation work.

   (b) Mention three types of soil tests commonly carried out on site.

   (c) State three effects of building on expansive or clay soil without proper soil investigation.

4. (a) What is a bill of quantities (BOQ)? State two uses of BOQ in a construction project.

   (b) List four items that are typically included in a BOQ.

   (c) Describe three consequences of using an inaccurate bill of quantities.

5. (a) Define the term “contractor’s site diary” and explain its role in project management.

   (b) List four types of information that must be recorded in a site diary.

   (c) Explain three ways in which poor site recordkeeping can affect project performance.