THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL

DIPLOMA IN TECHNICAL EDUCATION EXAMINATION

783 **BUILDING CONSTRUCTION**

Time: 3 Hour. **Tuesday, 18th May 2015 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) Explain three reasons why concrete must be compacted immediately after placement.

   (b) Describe three effects of poor compaction on the strength and durability of concrete.

   (c) Mention three methods used to compact concrete on site.

2. (a) State four reasons why building regulations are important in construction projects.

   (b) Describe three consequences of not adhering to building regulations during construction.

   (c) Explain two responsibilities of a site supervisor in enforcing building standards.

3. (a) Define the term “construction joint” and state its purpose in reinforced concrete works.

   (b) Give three conditions under which construction joints are required on site.

   (c) Outline three precautions to be observed when placing new concrete against an old joint.

4. (a) Explain four causes of cracks in building walls.

   (b) Describe three methods used to prevent cracks during and after construction.

   (c) List three signs that indicate serious structural cracks in a building.

5. (a) Define the term "formwork" and explain its role in concrete construction.

   (b) State four qualities of good formwork for reinforced concrete work.

   (c) Explain three reasons why early removal of formwork can be dangerous.