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

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## **BUILDING CONSTRUCTION**

Time: 3 Hour. Tuesday, 18<sup>th</sup> 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.