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

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## **BUILDING CONSTRUCTION**

Time: 3 Hour. Tuesday, 13<sup>th</sup> May 2008 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 "load distribution" in building construction.
  - (b) (i) Mention three elements of a building that help in load distribution.
    - (ii) Explain how improper load distribution can affect a building.
  - (c) State three methods of ensuring uniform load distribution in multi-storey buildings.
- 2. (a) What is site clearance? Explain its importance before starting any construction activity.
  - (b) (i) List four activities carried out during site clearance.
    - (ii) Give two consequences of skipping site clearance procedures.
  - (c) Describe three safety measures to be followed during site clearance operations.
- 3. (a) Explain the term "thermal insulation" in building design.
  - (b) State four materials used for thermal insulation in buildings.
  - (c) (i) Mention two benefits of thermal insulation to building occupants.
    - (ii) Give two reasons why insulation is important in hot climate zones.
- 4. (a) Define the term "temporary works" in construction projects.
  - (b) (i) Give three examples of temporary works used on construction sites.
    - (ii) Explain the role of temporary works in ensuring project safety and progress.
  - (c) State three factors to consider when designing temporary structures.
- 5. (a) What is quality control in construction?
  - (b) (i) Identify three quality control procedures used during construction.
    - (ii) Explain two risks of ignoring quality control on a project.
  - (c) Mention three parties responsible for quality assurance on a building site.