THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL

DIPLOMA IN TECHNICAL EDUCATION EXAMINATION

784 **BRICKWORK AND MASONRY**

Time: 3 Hour. **Wednesday, 18 May 2016 a.m**

Instructions

1. This paper consists of sections **six (6)** questions.
2. Answer question number **one (1)** and any other **four (4)** questions.
3. Question 1 carries **thirty-two (32)** marks and the rest carries **seventeen (17)** marks each.
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 “formwork”.

   (b) State four qualities of good formwork.

   (c) Describe the procedure for constructing and removing formwork for a concrete column.

2. (a) What is meant by scaffolding in construction?

   (b) Explain the functions of scaffolding during masonry works.

   (c) With the aid of a sketch, describe a simple working scaffold and label four important parts.

3. (a) State four defects commonly found in brickwork after construction.

   (b) Give two causes for each defect mentioned in 3(a).

   (c) Describe the remedial measures for correcting two of the defects.

4. (a) Explain the difference between lime mortar and cement mortar.

   (b) Give three advantages and three disadvantages of using lime mortar in masonry construction.

   (c) State the precautions to be taken when storing cement on site.

5. (a) What is the importance of using a plumb line and spirit level in masonry work?

   (b) Mention four possible effects of laying bricks without checking verticality and horizontality.

   (c) Describe the correct procedure for using a plumb line to check a wall.

6. (a) (i) Define the term “rendering”.

      (ii) State three purposes of rendering in masonry.

   (b) Describe the correct procedure for preparing a wall surface for rendering.

   (c) Explain three problems that may occur during rendering and how to prevent them.