THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN TECHNICAL EDUCATION EXAMINATION

784 BRICKWORK AND MASONRY

(SUPPLEMENTARY)

Time: 3 Hours **Year: 2000**

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. Cellular phones are **not** allowed in the examination room.
6. Write your **Examination Number** on every page of your answer booklet(s).

1. (a) Define the term "bonding in brickwork".

   (b) With sketches, explain the construction of an English bond in a one-brick thick wall.

2. (a) What is a lintel?

   (b) Mention three types of lintels used in masonry construction.

   (c) Describe the construction process of a reinforced concrete lintel over a door opening.

3. (a) Define the term “expansion joint”.

   (b) State three reasons why expansion joints are necessary in masonry structures.

4. (a) Mention four causes of cracks in masonry walls.

   (b) Explain how each cause can be minimized or prevented on site.

   (c) Suggest two methods of repairing cracks in brick walls.

5. (a) What is pointing in masonry work?

   (b) Mention three types of pointing used in brickwork.

6. (a) Differentiate between dry stone masonry and coursed stone masonry.

   (i) State two advantages of dry stone masonry.

   (ii) Give two examples where coursed stone masonry is more appropriate.