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

784 BRICKWORK AND MASONRY

(SUPPLEMENTARY)

Time: 3 Hours Year: 2005

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 "pier in masonry".
 - (b) State four functions of masonry piers.
 - (c) Describe the construction process of an isolated brick pier foundation.
- 2. (a) What is meant by the term "groined vault"?
 - (i) Mention two advantages of groined vaults.
 - (ii) With sketches, describe the construction of a groined vault.
- 3. (a) Define "jointing in stone masonry".
 - (b) Mention three types of joints.
 - (c) Explain how joints affect strength and appearance.
- 4. (a) List four factors affecting mortar setting.
 - (b) Explain two practices to ensure proper setting.
- 5. (a) What is meant by the term "arch ring"?
 - (b) State two functions of an arch ring.
- 6. (a) Differentiate between shallow and deep foundations.
 - (b) Suggest two cases where deep foundations are more appropriate.