THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL

DIPLOMA IN TECHNICAL EDUCATION EXAMINATION

783 **BUILDING CONSTRUCTION**

Time: 3 Hour. **Tuesday, 16th May 2006 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 "building services" and give two examples.

   (b) (i) Explain two reasons why building services are important in modern construction.

   (ii) List two professionals involved in the design or installation of building services.

   (c) Describe three challenges commonly encountered when installing building services on site.

2. (a) What is concrete segregation?

   (b) (i) State three causes of segregation during mixing or placing of concrete.

   (ii) Mention two effects of concrete segregation on structural integrity.

   (c) Give three methods of preventing segregation during concrete work.

3. (a) Explain the purpose of expansion joints in large buildings.

   (b) (i) List three locations where expansion joints should be installed.

   (ii) State two materials commonly used in expansion joints.

   (c) Mention three consequences of omitting expansion joints in a concrete structure.

4. (a) What is contract administration in a construction project?

   (b) (i) Identify three roles of a contract administrator.

   (ii) State two documents typically managed under contract administration.

   (c) Explain three risks that may arise from poor contract administration.

5. (a) Define the term "substructure" in building construction.

   (b) (i) List four components of a typical substructure.

   (ii) State two reasons for waterproofing a substructure.

   (c) Describe three site conditions that may require special substructure design.