**THE UNITED REPUBLIC OF TANZANIA**

**NATIONAL EXAMINATION COUNCIL**

**DIPLOMA IN TECHNICAL EDUCATION EXAMINATION**

**783** **BUILDING CONSTRUCTION**

**Time: 3 Hour.** **Tuesday, 13th May 2003 a.m.**

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**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 site layout and explain its significance during construction project execution.

   (b) (i) List three essential facilities that must be provided on a site layout.

   (ii) Explain two consequences of poor site layout planning.

   (c) Mention three ways in which site layout contributes to safety on a construction site.

2. (a) What is the role of project cost estimation in construction planning?

   (b) (i) Identify four key components considered when preparing a cost estimate.

   (ii) State two sources of data used for accurate estimation.

   (c) Give three challenges encountered during cost estimation in building projects.

3. (a) Define curing of concrete and explain why it is important.

   (b) (i) List four methods of curing concrete used in the field.

   (ii) State two effects of improper curing on the final strength of concrete.

   (c) Mention three site conditions that influence the choice of curing method.

4. (a) What is a contract document?

   (b) (i) Name three examples of documents that make up a complete contract package.

   (ii) Explain two reasons why contract documents must be reviewed before project start.

   (c) Describe three risks that arise when contract documents are incomplete or misunderstood.

5. (a) Define the term “construction waste management.”

   (b) (i) State four common types of construction waste generated on site.

   (ii) Explain two strategies for reducing construction waste during the building process.

   (c) Describe three environmental benefits of effective construction waste management.