



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

**UNIVERSITY EXAMINATIONS FOR THE DIPLOMA IN CONSTRUCTION
MANAGEMENT (TVET)**

1ST YEAR 2ND SEMESTER 2023/2024 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: TDC 2125

**COURSE TITLE: CONSTRUCTION MATERIALS, PLANT, TOOLS AND
EQUIPMENT MANAGEMENT**

EXAM VENUE: STREAM: Dip CONSTRUCTION MGT

DATE: ../04/2024 EXAM SESSION:

DURATION: 3 HOURS

Instructions

- 1. Answer ALL questions in Section A (Compulsory) and ANY other three questions in Section B**
- 2. Candidates are advised not to write on question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A (30 Marks)

1. a) Define the following terms:
 - i. Site facility (2 Marks)
 - ii. Workability (2 Marks)
 - iii. Plant (2 Marks)
 - iv. Equipment (2 Marks)
 - v. Curing (2 Marks)
- b) What is meant by seasoning of timber? Distinguish between natural and artificial seasoning. (6 Marks)
- c) Explain any three tests performed on stones to find their properties. (12 Marks)
- d) Briefly explain what verification of documents entails in construction. (2 Marks)

SECTION B (40 Marks)

2. a) Explain the roles of machines in construction. (10 Marks)
- b) List any five earth moving equipment (5 Marks)
- c) Explain factors to be considered in the process of equipment selection. (5 Marks)
3. a) Write short notes on:
 - i. Segregation of concrete (2 Marks)
 - ii. Bleeding of concrete (2 Marks)
 - iii. Water-cement ratio (2 Marks)
 - iv. Batching of concrete (2 Marks)
- b) Describe three tests on concrete. (12 Marks)
4. a) What is standard equipment schedule? (4 Marks)
- b) Draw and design a standard equipment schedule. (16 Marks)
5. a) What is standard material schedule? (4 Marks)
- b) Draw and design a standard material schedule. (16 Marks)