



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF ENGINEERING AND TECHNOLOGY**

**UNIVERSITY EXAMINATION FOR THE DEGREE IN SCIENCE IN  
CONSTRUCTION MANAGEMENT**

**2<sup>ND</sup> YEAR 1<sup>ST</sup> SEMESTER 2023/2024 ACADEMIC YEAR**

**CENTRE: MAIN CAMPUS**

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**COURSE CODE: TCB 1203**

**COURSE TITLE: BUILDING TECHNOLOGY I**

**EXAM VENUE:**

**STREAM: BSc. CONSTRUCTION MGT**

**DATE: /12/2023**

**EXAM SESSION:**

**DURATION: 2 HOURS**

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**Instructions**

- 1. Answer question 1 (Compulsory) and ANY other two questions**
- 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.**

**QUESTION ONE (30 Marks) Compulsory**

- a) What are site preliminaries? State and explain any four preliminary activities that precede construction works. (10 Marks)
- b) Using a clearly illustrated diagram, explain setting out as used in building construction. (5 Marks)
- c) What is the significance of site preparation when embarking on a construction project? (5 Marks)
- d) A building should satisfy some basic design and performance requirements. State and explain these requirements. (10 Marks)

**QUESTION TWO (20 Marks)**

- a) Outline the functions of windows in a building. (4 Marks)
- b) Explain the different types of windows based on functioning. (10 Marks)
- c) State any 6 functional requirements of a wall. (6 Marks)

**QUESTION THREE (20 Marks)**

- a) Classify foundations and using neat sketches illustrate the different types of foundations used in construction.

**QUESTION FOUR (20 Marks)**

- a) Describe in details the type of loads that act on buildings. (10 Marks)
- b) Name any two classification of roofs and outline the key functional requirements of a good roof. (10 Marks)

**QUESTION FIVE (20 Marks)**

- a) Highlight any FIVE possible causes of dampness in buildings and the possible mitigation measures. (8 Marks)
- b) Define timbering as used in excavation of trenches and state its significance. (2 Marks)
- c) Sketch and detail the basic components of a staircase. (10 Marks)