



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

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

2nd YEAR 1st SEMESTER 2024/2025 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: TCB 1203

DATE:15/1/25

COURSE TITLE: BUILDING TECHNOLOGY I

EXAM VENUE: STREAM: BSc. CONSTRUCTION MGT

DURATION: 2 HOURS

EXAM SESSION:9-11.00 AM

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)

- a) Highlight two different methods for conducting site investigation of a large buildings or difficult sites **(4 Marks)**
- b) Explain the purpose of flues in buildings **(2 Marks)**
- c) Explain the advantages and disadvantages of trench excavations with straight and battered surfaces **(4 Marks)**
- d) Briefly explain traditional and design-build project delivery methods **(4 Marks)**
- e) Briefly explain the difference between a normal mortice lock and a mortice dead lock **(4 Marks)**
- f) With the aid of a well labelled sketch explain a lean-to roof **(6 Marks)**
- g) Explain the key functions of walls in a building **(6 Marks)**

QUESTION TWO (20 Marks)

- a) By use of sketches, describe types of windows based on methods of opening **(18 Marks)**
- b) Explain what a window sill entails **(2 Marks)**

QUESTION THREE (20 Marks)

- a) With the aid of neat sketches discuss the difference between pad and normal strip foundations **(8 Marks)**
- b) Explain reasons that can prompt underpinning of foundations **(6 Marks)**
- c) Describe precautions necessary prior to the underpinning process **(6 Marks)**

QUESTION FOUR (20 Marks)

- a) Draw a neat well labelled sketch of a cavity wall **(8 Marks)**
- b) By use of sketches, illustrate three types of bonds used in brick masonry **(9 Marks)**
- c) Outline three ways through which moisture enter into a building **(3 Marks)**

QUESTION FIVE (20 Marks)

- a) Briefly highlight the key functions of a roof **(6 Marks)**
- b) With the aid of a well labelled neat sketch describe an eaves detail of a tiled roof **(14 Marks)**