



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF HEALTH SCIENCES**  
**UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE PUBLIC**  
**HEALTH / COMMUNITY HEALTH AND DEVELOPMENT**  
**2<sup>ND</sup> YEAR 2<sup>ND</sup> SEMESTER 2022/2023 ACADEMIC YEAR**  
**MAIN CAMPUS**

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**COURSE CODE: HCB 1204**

**COURSE TITLE: BUILDING CONSTRUCTION AND TECHNOLOGY**

**EXAM VENUE: STREAM: (BSc. Env. Hlth.)**

**DATE: EXAM SESSION: DEC 2022**

**TIME: 2.00 HOURS**

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**Instructions:**

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

**SECTION A: SHORT ANSWER QUESTIONS. ANSWER ALL THE QUESTIONS (30 Marks)**

1. Define the following terms in Building construction **(3marks)**
  - a. Building Plan
  - b. Elevations
  - c. Model
2. Describe the reasons and circumstances for using damp proof membrane. **(2 marks)**
3. List THREE factors to consider while selecting a building site **(3 marks)**
4. State the function of cement as a building material **(2 marks)**
5. Explain THREE main uses of technical drawings in building planning and construction. **(5 marks)**
6. How do you determine the adequacy of Lighting and ventilation in a proposed building **(5 Marks)**
7. List THREE considerations that influence roof design **(3 marks)**
8. Explain the importance of structural plan in building plans inspection. **(3 marks)**
9. Describe the functions of these types of walls**(4marks)**
  - a. Retention walls
  - b. Security walls

**SECTION B: ANSWER QUESTION ONE (1) AND ANY OTHER QUESTION (40 MKS)**

1. What is a “bill of quantities” ? **(5marks)**
  - a. Provide a sketch sample of hypothetical bill of Quantities ( BQ) **5 marks)**
  - b. Explain how BQ is used in the management of a building Project **(10 marks).**
2. Provide a descriptive outline of a building inspection report **(20marks)**
3. Information, communication and Technological innovations have great impact in all sectors including the building and construction industry. Discuss the impact of information exchange on the Design and Construction of Buildings **(20 marks).**
4. a. Under the regulatory framework, state three ACTS of Parliament widely applied in the building regulations **(5marks).**
  - b. Describe the documents required before the authorization of a construction to commence **(15 marks).**