



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF HEALTH SCIENCES**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE**  
**PUBLIC HEALTH/COMMUNITY HEALTH AND DEVELOPMENT**  
**SPECIAL EXAMS**

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**COURSE CODE: HPD 3222**

**COURSE TITLE: Building Construction & Technology**

**EXAM VENUE: STREAM: BSC PUBLIC/COMM.HLTH&DEV.**

**DATE: EXAM SESSION:**

**TIME: 2.00 HOURS**

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**Instructions:**

- 1. Answer all the questions in Section A and 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**

1. Define the following terms
  - a. A building (1mark)
  - b. A dwelling (1mark)
2. State the difference between a joint and a bed during construction work (2marks)
3. State two advantages of using stones in constructions (3 marks)
4. List two disadvantages of using stones in constructions (2 marks)
5. State the two types of sand (3 marks)
6. List four properties of good sand (3 marks)
7. State the disadvantages of using bricks in the construction (3 marks)
8. State three qualities of good cement (4 mark)
9. State the role of a damp proof course (DPC) in a building (5 marks)
10. State the advantages of using bricks in a construction (3 marks)

## **SECTION B**

1. Describe sand as a major building material (20 marks)
2. (a) Explain the advantages of using approved technical drawing and site plan before commencement of any construction work (10 marks)
3. (b) Cement is the most important building material in solid masonry work. Explain this statement with relevant examples (10 marks)  
(10 marks)
4. Explain the steps or process of building a permanent residential building (20 marks)
5. Explain the importance of a mortar, describing where it is used (20 marks)