



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

**SCHOOL OF ENGINEERING AND TECHNOLOGY**

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

**1<sup>ST</sup> YEAR 1<sup>ST</sup> SEMESTER 2024/2025 ACADEMIC YEAR**

**CENTRE: MAIN CAMPUS**

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**COURSE CODE: TCB 1103**

**COURSE TITLE: HISTORY OF CONSTRUCTION**

**EXAM VENUE:**

**STREAM: BSc. CONSTRUCTION MGT**

**DATE: 13 /1/2025**

**EXAM SESSION:9-11.00 AM**

**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)**

- a. Define the following terminologies associated with the historical development of the construction industry **(10 Marks)**.
  - i. Medieval construction era
  - ii. Pozzolana
  - iii. Prairie house style
  - iv. Appian way
  - v. Dovetail technique
- b. Discuss key eras associated with the development of bridge technology **(4 Marks)**.
- c. Explain why the concept of subcontracting or outsourcing is gaining prominence in the construction industry **(6 Marks)**.
- d. Classical and Neo-Classical theories have shaped the today's management style. In each case highlight two theorists and the management ideals they stood for. **(8 Marks)**.
- e. Highlight the development of kilns in the manufacture of cement **(2 Marks)**.

### **QUESTION TWO (20 MARKS)**

The ancient City of Maniitoba was known for the development of various construction materials and techniques.

- a. Discuss the construction materials employed by the early man prior to the advent of manufactured building materials **(8 Marks)**.
- b. How do the early shelters compare with the indigenous shelters in western Kenya in terms of construction materials and techniques? **(4 Marks)**.
- c. Discuss the various timber construction techniques developed during this era in the City of Maniitoba **(8 Marks)**.

### **QUESTION THREE (20 MARKS)**

- a. Briefly explain the scientific invention that led to evolution of the early road? **(4 Marks)**.
- b. Discuss the origin of toll roads as a strategic way of maintaining roads? **(8 Marks)**.
- c. The Romans are historically known for their prowess in road construction. Discuss the major features of the first Roman road **(8 Marks)**.

### **QUESTION FOUR (20 MARKS)**

- a. Briefly state key functions of architecture in the ancient era **(4 Marks)**.
- b. The historical development of architecture was associated with landmark styles. Discuss the major features of romanescque, gothic, baroque and rococo movements that stood significant in historical development of architecture **(16 Marks)**.

### **QUESTION FIVE (20 MARKS)**

The discovery of steel as a construction material revolutionized the construction industry.

- a. Discuss the historical development of steel as a construction material **(10 Marks)**.
- b. Highlight the significant contribution of the invention of steel to the construction industry at large **(10 Marks)**.