



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

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

1ST YEAR 1ST SEMESTER UNIVERSITY EXAMINATIONS 2021-2022 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: TCB 1103

COURSE TITLE: HISTORY OF CONSTRUCTION

EXAM VENUE: STREAM: BSc CONSTRUCTION MGT

DATE: /12/2021 EXAM SESSION:

DURATION: 2 HOURS

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 (30MARKS)

- a. Define the following terminologies associated with the historical development of the construction industry **(10marks)**.
 - i. Project
 - ii. Girder bridge
 - iii. Aqueduct
 - iv. Balloon framing technique
 - v. Macadam
- b. Trace evolution of construction labour relations beginning from early 12th century **(8marks)**.
- c. Name pioneer neo-classical theorists and what management ideals they stood for **(6marks)**.
- d. Discuss key issues that have historically shaped the evolution of bridge technology **(6marks)**.

QUESTION TWO (20MARKS)

- a. Briefly explain the origins of the early tar road **(4marks)**.
- b. Discuss the historical contribution of Tresaquet, a French to the road construction system **(12marks)**.
- c. Discuss how Telford, a Scottish surveyor and engineer improved on Tresaquet's road construction technique **(4marks)**.

QUESTION THREE (20MARKS)

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

- a. Discuss the historical development of steel as a construction material **(10marks)**.
- b. Highlight the significant contribution of the invention of steel to the construction industry at large **(5marks)**.

- c. State properties of steel that gives it prominence in the construction industry **(3marks)**
- d. Highlight the short comings of steel as a construction material **(2marks)**

QUESTION FOUR **(20MARKS)**

- a. Briefly state what materials of construction were used in construction before the advent of manufactured materials **(4marks)**.
- b. How did the historical shelters of the Aborigines compare with the historical African hut? **(6marks)**.
- c. Discuss the technologies of construction that were employed in the City of Manitoba with respect to log and light wood frame construction **(10marks)**.

QUESTION FIVE **(20MARKS)**

- a. Briefly define the following terms applied as styles in ancient architecture **(4marks)**.
 - i) Romanesque
 - ii) Gothic
- b. Briefly discuss the features of architectural styles mentioned in question (a) above **(8marks)**.
- c. Historical concept of tall buildings founded in America from 1849 has immensely contributed to the contemporary high-rise buildings that dot global sky lines.
 - i) Highlight the concept of these tall buildings as they were historically known and the architect who was behind the innovation. (4marks).
 - ii) State the historical innovations that facilitated this concept (4marks).