

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

#### SCHOOL OF ENGINEERING AND TECHNOLOGY

# UNIVERSITY EXAMIMATION FOR THE DEGREE IN SCIENCE IN CONSTRUCTION MANAGEMENT

## 4<sup>TH</sup> YEAR 1<sup>ST</sup> SEMESTER 2022/2023 ACADEMIC YEAR

**CENTRE: MAIN CAMPUS** 

**COURSE CODE: TCB 1403** 

COURSE TITLE: SITE ORGANIZATION AND MANAGEMENT

EXAM VENUE: STREAM: BSc. CONSTRUCTION MGT

**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 (30marks)

- a) Briefly explain the following terminologies commonly used in construction sites (10marks)
  - i. Performance security
  - ii. Workman's compensation
  - iii. Provisional cost sum
  - iv. Pre-contract meeting
  - v. Scaffolding
- b) Discuss five temporary structures required in building construction site prior to work commencement (10marks)
- c) Highlight four main electrical power triggered hazards/risks in construction sites of multistoreyed projects in urban set ups (4marks)
- d) Outline four strategies a safety officer would employ to minimize accidents on construction sites (4marks).
- e) Briefly explain means of providing security in construction sites (2marks).

### QUESTION TWO (20marks)

Assuming you have been appointed a Project Manager to manage construction of a modern high-rise office complex in the City of Nairobi neighboring Nairobi River and accessed through a City Road.

- a) State eight key-built environment professionals you would recommend for recruitment as consultants for the project **(4marks)**.
- b) Briefly highlight to your employer your role as a Project Manager (6marks).
- c) Advice your employer on statutory approvals and their relevance to this project (6marks)
- d) Advice your employer on sub-contracts that would be relevant to this project (4marks)

# QUESTION THREE (20marks)

Disasters are construction risks that are either natural or man-made and can pose serious impacts on construction projects. Assuming you have been employed as a project manager explain to your client the following:

- a) Response measures that should be taken should a disaster occur (5marks).
- b) The scope of emergency preparedness and disaster management plan for construction sites (5marks).

- c) Various measures of disaster preparedness (6marks)
- d) Measures a Site Supervisor take in the event that one of the site workers is injured during a disaster or accident **(4marks).**

## QUESTION FOUR (20marks)

The Public procurement and Disposal Act was enacted by the Kenyan government to facilitate procurement in public entities. Answer the following questions with respect to this Act of Parliament.

- a) Briefly explain the objectives this Act of Parliament was intended to achieve (6marks)
- b) Briefly explain the advantages of direct tendering compared to open tendering system (4marks).
- c) As a project manager, advise your employer who is public entity on other alternative forms of tendering for procuring contractors other than direct and open tendering (5marks)
- d) State under what circumstances an individual or firm can be debarred in participating in public procurement (5marks)

## QUESTION FIVE (20marks)

- a) What strategies would you put in place to increase productivity of construction workers? (10marks)
- b) i. Why is it necessary for a Project Manager to prepare and submit site progress reports to the employer? (2marks).
  - ii. Highlight the main components of a typical site weekly report for a building construction project (8marks).