

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF ENGINEERING AND TECHNOLOGY

UNIVERSITY EXAMINATIONS FOR THE DIPLOMA IN BUILDING AND CIVIL ENGINEERING

3RD YEAR 2ND SEMESTER 2017/2018 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

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COURSE CODE: TBC 2324

COURSE TITLE: CONSTRUCTION IMPACT ON ENVIRONMENT

EXAM VENUE: LR 15 STREAM: DIP IN BLD & CIV ENG

DATE: 13/12/2017 EXAM SESSION: 9.00 – 10.30AM

DURATION: 1½ 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 commonly used in environmental management and safety in construction sites (10marks)
 - i. Element
 - ii. Noise
 - iii. Natural resource
 - iv. Factory inspector
 - v. Workman compensation
- b) Discuss major causes of accidents in construction sites (10marks)
- c) Briefly state the various structures both at national and field offices provided in law to manage and coordinate matters related to the environmental management (10marks)

QUESTION TWO (20marks)

- a) Explain what environmental audit entails (4marks)
- b) Clearly highlight three key distinctions between environmental review and auditing (6marks)
- c) Differentiate between pollution and waste (4marks)
- d) Briefly explain the provisions of the environmental management and coordination act, 1999 regarding environmental monitoring (**6marks**)

QUESTION THREE (20marks)

A developer is intending to put up a fish processing factory at Wich Lum beach in Bondo sub county. The project also includes construction of an 8km murram road. Briefly explain the possible impacts of the project on the immediate neighborhood both at construction and operation phases.

QUESTION FOUR (20marks)

- a) Define the following terminologies applied in environmental management (6marks)
 - i. Environmental impact assessment
 - ii. Sustainable development
 - iii. Polluter pays principle
- b) Briefly explain what environmental management entails (4marks)
- c) Describe various processes of environmental impact assessment in Kenya (10marks)

QUESTION FIVE (20marks)

- a) Define the following terminologies with regard to operations on construction sites (4marks)
 - i. Accident
 - ii. Safety
- b) What are the key ingredients of a first aid kit? (6marks)
- c) State five ways of minimizing accidents in construction sites (10marks)