



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

**SCHOOL OF ENGINEERING AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS FOR THE TVET DIPLOMA IN CONSTRUCTION  
MANAGEMENT 1ST YEAR 2<sup>ND</sup> SEMESTER EXAMINATIONS**

**CENTRE: MAIN CAMPUS**

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**COURSE CODE: TDC 2126**

**COURSE TITLE: PROJECT TIME MANAGEMENT I**

**EXAM VENUE: STREAM: DIP IN CONSTRUCTION MGT.**

**DATE: ../04/2024 EXAM SESSION:**

**DURATION: 3 HOURS**  
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**Instructions**

- 1. Answer question 1 (Compulsory) and ANY other three 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 (40 Marks)**

- a) Explain the following terminologies commonly used in construction project management **(10 Marks)**
  - i. Management
  - ii. Critical path
  - iii. Activity arrow
  - iv. Event
  - v. Path set
- b) Briefly describe managerial skills and the levels at which they are applied **(9 Marks)**
- c) Briefly highlight the uses of a work breakdown structure **(4 Marks)**
- d) Explain what the earliest time and latest time in a network project scheduling diagram entail including how they are calculated **(6 Marks)**
- e) Briefly highlight sequentially six construction activities that culminate to the completion of a concrete ground floor slab **(3 Marks)**
- f) Briefly highlight the difference between pessimistic time and optimistic time in project scheduling **(4 Marks)**
- g) Explain what method statement entails in pretender planning **(4 Marks)**.

### **QUESTION TWO (20 Marks)**

- a) Explain network as a scheduling tool and also trace its historical development **(8 Marks)**.
- b) Discuss four different approaches to project management **(12 Marks)**

### **QUESTION THREE (20 Marks)**

- a) A problem to be solved by a proposed project must be “SMART”. Explain what SMART entails **(2 Marks)**.
- b) Explain Godzilla Principle in problem identification **(5 Marks)**.
- c) Outline the steps in project identification process **(8 Marks)**.
- d) Explain benefits of managing a project well **(5 Marks)**.

### **QUESTION FOUR (20 Marks)**

- a) Explain what “British Standards” entails and why it is important in the construction sector **(6 Marks)**.
- b) Explain how planning consent for a proposed project is obtained from a County Government and state what type of developments do not require planning consent **(6 Marks)**
- c) State the building aspects building bye-laws and regulations govern **(8 Marks)**.

### **QUESTION FIVE (20 Marks)**

- a) Describe how project quality dimension can be planned **(4 Marks)**
- b) Describe the steps for setting up a work breakdown structure for a construction project **(6 Marks)**.

- c) Explain which areas network analysis provide information on **(5 Marks)**.
- d) Outline five factors that have impeded the application of network scheduling in project management **(5 Marks)**

**QUESTION SIX (20 Marks)**

- a) Explain why Gantt charts are useful tools for planning and scheduling projects **(6 Marks)**.
- b) The Table below shows activities of a construction project with their durations. Preceding activities have also been highlighted. Using the information sketch a Gantt chart showing activity float and the construction Period **(14 Marks)**.

ACTIVITY	ACTIVITY DURATIONS(WEEKS)	PRECEEDING ACTIVITY
A	4	....
B	3	.....
C	5	A
D	3	A
E	4	B
F	4	B
G	2	B.C
H	2	D
I	3	D.E. G
J	5	D.E. G
K	4	H. I
L	6	F. J