

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2019/2020 ACADEMIC YEAR

SPECIAL / SUPPLIMENTARY EXAMINATION

FOURTH YEAR SEMESTER TWO EXAMINATIONS

FOR THE DEGREE
OF
EDUCATION TECHNOLOGY IN CIVIL AND STRUCTURAL
ENGINEERING

COURSE CODE: TEB 464

COURSE TITLE: QUANTITY SURVEYING II

DATE: FRIDAY 22ND JANUARY 2021 TIME: 11.00 AM - 1.00 PM

INSTRUCTIONS:

- 1. This paper consists of **FOUR** questions.
- 2. ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS.
- 3. Marks for each question are indicated in the parenthesis.

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over.

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Question ONE (30 Marks)

a) Explain the role of measurement as used by the following construction professionals:

- i. Project manager
- ii. Quantity surveyor

iii. Contractor [4 Marks]

b) Highlight any **TWO** importance of specification document in civil works. [2 Marks]

c) Highlight any **FOUR** functions of Standard Method of Measurement as applied in "Taking – Off" of quantities. [4 Marks]

- d) Using appropriate examples, state and explain the **FOUR** principal units of measurement as used in the Standard Methods of Measurement. [8 Marks]
- e) Highlight **FIVE** considerations to be undertaken by a contractor before deciding on an outright purchase of specific items of plant for the business.

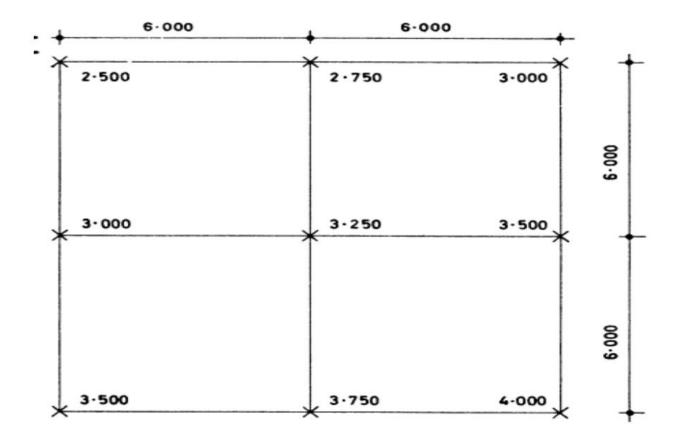
[5 Marks]

- f) Discuss how the following factors are involved in the forecasting of future pricing levels of engineering commodity.
 - i. Past Economic Performance
 - ii. Current Global Conditions
 - iii. Rate of Inflation [3 Marks]
- g) Briefly describe how the following factors influence the costs of buildings.
 - i. Electrical installations
 - ii. Size of building
 - iii. Circulation space
 - iv. Lifts [4 Marks]

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Question TWO (20 marks)

a) The figure below illustrates a sloping site excavation approach used for the determination of excavation volume. The excavation is required down to a level of 2.20 m, including excavating vegetable soil to a depth of 175 mm and no fill required. Determine the average adjusted depth to be entered in the dimension paper. [15 Marks]



b) Present the dimensions of the above site in a dimension paper, giving the description of items involved. [5 Marks]

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Question THREE (20 marks)

a) Discuss **FOUR** ways which a contractor can employ to acquire a mechanical plant for his construction works. [8 Marks]

- b) Mason Ltd purchased a machinery costing Kshs. 60,000,000 for a specific project and expected useful life of 10 years. Given the rate of depreciation as 20%, determine the value of the plant at the end of 10 years using written down value method. [8 Marks]
- c) Highlight **TWO** advantages and two disadvantages of buying a mechanical plant. [4 Marks]

Question FOUR (20 Marks)

- a) Discuss any **THREE** important components of Specifications contents. [6 Marks]
- b) Discuss **FOUR** basic principles of writing Specifications. [8 Marks]
- c) Discuss **THREE** components of Technical Requirements of Specifications. [6 Marks]