



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

THIRD YEAR SECOND SEMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN CIVIL AND STRUCTURAL
ENGINEERING**

COURSE CODE: BTB 463

COURSE TITLE: BUILDING ECONOMICS

DATE: 6TH DECEMBER 2022 TIME: 8 - 10 A.M

INSTRUCTIONS:

1. This paper contains **Five** Questions
2. Answer question **One** and **any other two**.
3. Marks for each question are indicated in the parenthesis.
4. Examination duration is **2 Hours**

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 3 Printed Pages. Please Turn Over.

QUESTION ONE (COMPULSORY -40MKS)

- a) The concept of cost control is critical in building economics. Give an account as to why the Quantity Surveyor is engaged at the design stage. (6marks)
- b) Explain the following as far as the economic context of building economics is concerned.
- i) Building is expensive (3marks)
 - ii) Shelter (3marks)
 - iii) Initial costs (3marks)
- c) Give an account of the following in the context of material, labour and physical capital?
- i) Competition (4mks)
 - ii) Economics of scale (4mks)
 - iii) Use available of technology (4mks)
- d) Discuss whole unit method of estimation. (3mks)
- e) Explain the importance of building economics in National economy. (5mks)
- f) Give a brief account on the sources of financing construction projects (5mks)

Attempt ANY 2 Questions from this section (30MKS)

QUESTION TWO

- a) Discuss Religion, Technology and Culture in the context of economic considerations during the design stage. (9mks)
- b) Distinguish between fixed-rate and flexible-rate mortgages. (6mks)

QUESTION THREE

Discuss the five considerations while carrying out estimation (15mks)

QUESTION FOUR

- a) Give brief account on the following;
- Monetary benefits of the building (4mks)
 - Non-monetary benefits of the building (4mks)
- b) Outline the process of economic analysis (7mks)

QUESTION FIVE

- a) Discuss in details giving illustrations on two strategies to address prolonged period of construction as way of minimizing initial costs of the project. (6mks)
- b) Give a brief description of the following
 - i) Operational costs (3mks)
 - ii) Utilities (3mks)
 - iii) Maintenance costs (3mks)

