



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF ENGINEERING AND TECHNOLOGY

Department of BUILDING & Civil engineering

UNIVERSITY EXAMINATION FOR:

BACHELOR OF SCIENCE IN ENVIRONMENTAL HEALTH

EBC 4451 : BUILDING PATHOLOGY

END OF SEMESTER EXAMINATION

SERIES: AUGUST 2024

TIME: 2 HOURS

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **five** questions.

Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

QUESTION ONE (COMPULSORY) 20 Marks

- a) Explain the two main types of maintenance (4 marks)
- b) Outline the four constituents of concrete (8marks)
- c) State four qualities of good formwork (4 marks)
- d) Sketch and label the parts of solid ground floor (4 marks)

ANSWER ANY TWO QUESTIONS FROM THIS SECTION

QUESTION TWO (20 Marks)

- a) Outline four objectives of building pathology (4 marks)
- b) Explain the procedure of plastering a block wall (12 marks)
- c) State four side effects of environmental pollution (4 marks)

QUESTION THREE (20 Marks)

- a) Explain the following
 - i. Rusting defects
 - ii. Mold growth defect (10 marks)

- b) State five signs of maximum compaction in concrete (5 marks)
- c) State four effects of poor supervision in construction site (5 marks)

QUESTION FOUR (20 Marks)

- a) State six causes of accidents in construction site (6 marks)
- b) Use sketches to differentiate strip foundation from stepped strip foundation (4 marks)
- c) Outline the causes of cracks in buildings and their remedies (10 marks)

QUESTION FIVE (20 Marks)

- a) Explain the importance of building pathology report (6 marks)
- b) Outline the duties of building inspectors in building site (6 marks)
- c) State the advantages of modern construction techniques (4 marks)
- d) State four defects of plastered surface (4 marks)