



MACHAKOS UNIVERSITY
University Examinations for 2021/2022 Academic Year
SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF BUILDING & CIVIL ENGINEERING
FIRST YEAR SECOND TERM EXAMINATION FOR
DIPLOMA IN BUILDING TECHNOLOGY
DIPLOMA IN CIVIL ENGINEERING

2705&7 / 105 BC: GENERAL BUILDING CONSTRUCTION I

DATE: 1/4/2022

TIME: 11.30-2.30 PM

INSTRUCTIONS

- *This paper consists of **FIVE** questions.*
- *Answer **ALL** questions.*
- *All questions carry equal marks.*
- *Maximum marks for each part of the question are as shown.*

1.

- a) Explain **Four** stages in the building process. (8 marks)
- b) Outline the evolution of the built environment. (6 marks)
- c) Describe **Four** construction documents used in the building process. (6 marks)

2.

- a) State **Six** reasons for site investigation. (6 marks)
- b) Explain **Three** activities carried out during site investigation. (6 marks)
- c) Outline the procedure of carrying out site investigation on a construction site. (8 marks)

3.

- a) Illustrate **Three** methods of reducing levels on a construction site. (6 marks)
- b) State **Four** tools and equipment used in levelling a site, giving one function of each equipment. (6 marks)

- c) State **Two** roles of each of the following members of a construction team:
- i) Client
 - ii) Architect
 - iii) Quantity Surveyor
 - iv) Site Supervisor (8 marks)

4.

- a) Explain the term “Setting out” as used in construction. (2 marks)
- b) Illustrate **Three** methods of setting out a building on a construction site. (9 marks)
- c) Outline the procedure of setting out a rectangular building. (9 marks)

5.

- a) Illustrate **Four** building code requirements for strip foundations. (8 marks)
- b) Sketch and label a pictorial view of the timbering provided to trenches in firm soils. (12 marks)