



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021

**SCHOOL OF ENGINEERING AND TECHNOLOGY  
DEPARTMENT OF BUILDING AND CIVIL ENGINEERING  
FIRST YEAR FIRST TERM FOR CERTIFICATE IN  
DIPLOMA IN CIVIL ENGINEERING  
GENERAL BUILDING CONSTRUCTION 1**

**DATE: 10/6/2021**

**TIME: 2:30 – 5:30 PM**

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## INSTRUCTIONS

### Answer all Questions

1.
  - a) Briefly describe the evolution of the built environment (10 marks)
  - b) Outline the FOUR stages involved in the following building process explaining each one of them. (10 marks)
2. Outline two duties of the each of the following members in the building team;
  - a) client
  - b) Architect (20 marks)
  - c) Draughtsman
  - d) Quantity surveyor
  - e) Contractor
3.
  - a) State FOUR reasons of site clearance (8 marks)
  - b) Name and sketch THREE methods of leveling a sloping site (12 marks)
4.
  - a) State FOUR functional requirements of a good foundation (8 marks)

- b) Make well labeled neat sketches of the following types of foundations (12 marks)
- i. Traditional strip foundation
  - ii. Deep strip foundation
  - iii. Wide strip foundation
  - iv. Pad foundations
5. a) State four functional requirements of floors (8 marks)
- b) Sketch and label a vertical section through a strip foundation in a firm ground showing the construction details upto the floor level. (12 marks)