



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

SECOND YEAR SECOND TERM EXAMINATION FOR

DIPLOMA IN CIVIL ENGINEERING

BULDING CONSTRUCTION 11

DATE:

TIME:

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## INSTRUCTIONS:

Answer all the five questions

1. (a) i) Compare and contrast environmental considerations in relation to a building location. (5 marks)  
ii) Briefly describe the evolution of the built environment (5 marks)
- (b) With well labeled sketches, show the detail of the following types of foundations
  - i. Traditional strip foundation (5 marks)
  - ii. Wide strip foundation. (5 marks)
2. a) List four functional requirements of a good foundation (8 marks)  
b) With the aid of neat sketches, differentiate between a brick wall in Flemish and English bonds (12 marks)
3. a) State five functions of a wall (10 marks)  
b) Explain the following terms as applied to walls:
  - i. Plastering and Rendering (4 marks)
  - ii. Pointing and jointing (4 marks)  
c) Briefly explain the term "Settlement" (2 marks)

4. a) List Four Functions of hardcore under a floor slab (4 marks)
- b) Make neat sketches of the following types of single roofs (16 marks)
- i. lean to roof
  - ii. couple roof (16 marks)
  - iii. closed couple roof
  - iv. collar roof
5. Make neat well labelled sketches of the following types of doors
- (a) ledged and battened door
  - (b) ledged, braced and battened door
  - (c) framed, ledged, battened and braced door (20 marks)

