



# MACHAKOS UNIVERSITY

University Examination 2018/2019

SCHOOL OF ENGINEERING AND TECHNOLOGY  
DEPARTMENT OF BUILDING AND CIVIL ENGINEERING  
FIRST YEAR FIRST SEMESTER EXAMINATION FOR

DIPLOMA IN BUILDING TECHNOLOGY

BUILDING CONSTRUCTION 1

DATE:17/4/2019

TIME:8.30-11.30 AM

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## INSTRUCTIONS

*Answer all the five questions*

1. a) State;
- i. Five items that may be considered in site clearance. (5 marks)
  - ii. TWO methods of clearing a construction site. (2 marks)
- b) Figure 1 below shows a sloping site.

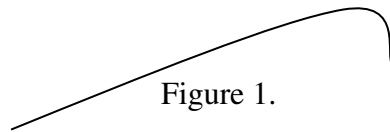


Figure 1.

- i. Describe TWO methods of achieving a level foundation trench. (4 marks)
  - ii. State the most economical foundation that may be used in this situation. (1 mark)
- c) State TWO functional requirements of a good foundation. (4 marks)
- d) Sketch and label a traditional strip foundation. (4 marks)
2. a) Describe any FOUR forms of wall construction. (10 marks)
- b) Differentiate between a D. P. C and a D. P. M. (5 marks)

- c) Differentiate between a door frame and a door lining. (5 marks)
3. a) Make neat sketches of any TWO types of match-boarded doors naming all the members. (10 marks)
- b) Make a neat sketch of a door frame and name all the parts. (5 marks)
- c) Briefly outline the evolution of the built environment (5 marks)
4. Outline two duties of each of the following members of the building team:
- a) contractor
- b) client
- c) quantity surveyor
- d) clerk of works (20 marks)
- e) architect
5. a) Sketch the following types of foundations
- i. pad foundation
- ii. Stepped foundation
- iii. wide strip foundation
- iv. deep strip foundation (16 marks)
- b) State two functions of windows (4 marks)