



# MACHAKOS UNIVERSITY

University Examination 2018/2019

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

CERTIFICATE IN BUILDING CONSTRUCTION

BCEBT210 GENERAL BUILDING CONSTRUCTION

DATE: 31/7/2019

TIME: 2.00-4.00 PM

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**INSTRUCTIONS:** Answer questions **ONE** and any other **TWO** questions.

1. a) State 5 reasons for maintaining a building (5 marks)
- b) Draw and label Portsmouth ball valve (10 marks)
- c) Outline three advantages of plastics cistern over mild-steel cistern (6 marks)
- d) State two advantages and disadvantages of direct cold water supply (4 marks)
- e) State 5 principles of good drainage (5 marks)
2. a) Outline 3 points to consider when planning drain laying (6 marks)
- b) With a well labelled diagram, discuss combined scheme of laying drains or pipes (14 marks)
3. a) Discuss three advantages of indirect hot water system over direct hot water system (6 marks)
- b) Illustrate with a sketch an indirect hot water system installation in a building (14 marks)

- 4 a) Discuss the importance of fitting traps when laying drains (4 marks)
- b) Draw and label an 's' trap outlet (6 marks)
- c) With a well labelled diagram illustrate an inspection chamber (10 marks)
- 5 a) Draw and label a light circuit wiring for building (10 marks)
- b) Using sketches discuss how you can insulate the ceiling of building against heat (10 marks)