

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF ARCHITECTURE AND QUANTITY SURVEYING

DEPARTMENT OF QUANTITY SURVEYING
PART ONE FIRST SEMESTER SUPPLEMENTARY EXAMINATION
BUILDING CONSTRUCTION 1

INSTRUCTIONS

1. ANSWER ALL QUESTIONS
 2. USE CLEAR AND WELL ANNOTATED DIAGRAMS
 3. ALL QUESTIONS CARRY EQUAL MARKS
 4. START ALL QUESTIONS ON A FRESH PAGE
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QUESTION 1

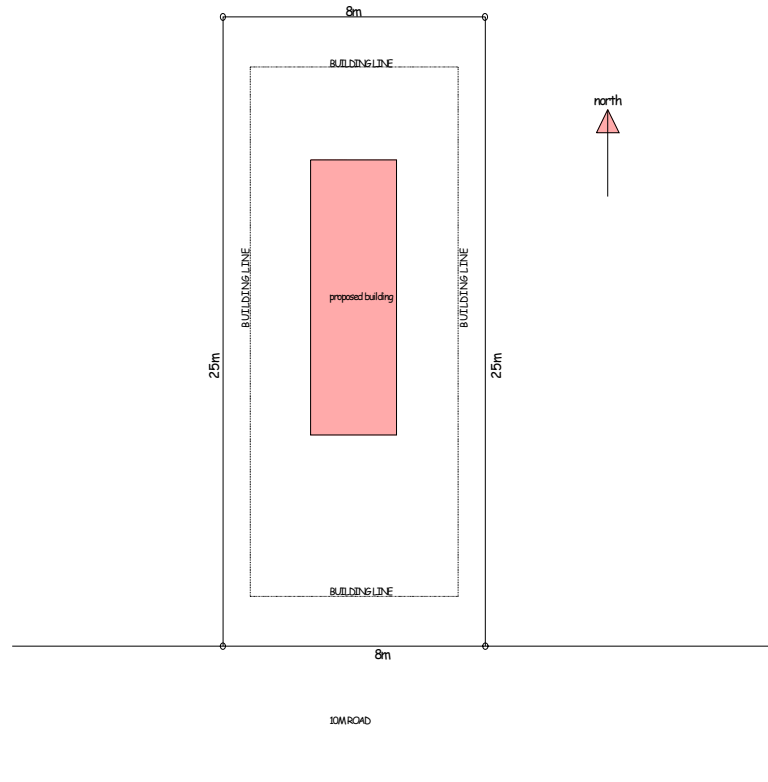
- a) Give two reasons for fencing a site
(2 marks)
- b) A proposed site in the CBD is sharing a common boundary with a six storey building. What would you do before you start clearing all construction work?
(2 marks)
- c) What is hoarding and what procedures are involved in erecting a hoarding unit within a local authority. List four materials used in hoarding construction.
(6 marks)
- d) Sketch a floor plan of a site temporary facility consisting of change rooms and toilets to cater for twenty five females and one hundred males and attached to it is a kitchen.
(10 marks)

QUESTION 2

- a) What is the purpose of a conveyer belt on site?
(2 marks)
- b) Plant on site can be of combined efforts, give one example and explain how they would operate jointly. Illustrate
(6 marks)
- c) What would you do as an employee to ensure your safety on site?
(4 marks)
- d) List all the protective clothing used on site.
(4 marks)
- e) What do you understand by the statement, 'stock-holding policy' for materials on site. Discuss.
(4 marks)

QUESTION 3

- a) Describe how you would set out a rectangular building on the given high density residential stand



Include all the necessary information, i.e.; datum point, base line, building line dimensions, profile board dimensions etc.

(12 marks)

b) Draw a typical corner profile board.

(4 marks)

c) Draw a typical builder's square.

(4 marks)

QUESTION 4

a) What is the difference between dead loads and superimposed loads on/of a building? Give examples.

(4 marks)

b) Define settlement and state how it can occur and its effects.

(6 marks)

c) Which factors affect the choice of a foundation?

(6 marks)

d) Which are the two categories of foundation? Describe and give examples.

(4 marks)

QUESTION 5

a) Draw a typical timber truss roof section from above window head level.

(10 marks)

b) List, four different types of roof cover material you know.

(4 marks)

c) Describe the two types of pile foundations. Mention where they could be used best.

(6 marks)