

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY  
FACULTY OF ARCHITECTURE AND QUANTITY SURVEYING  
BACHELOR OF QUANTITY SURVEYING (HONOURS) DEGREE  
PART ONE FIRST SEMESTER EXAMINATION – DECEMBER 2005  
BUILDING CONSTRUCTION 1 – AQS 1110**

**Time: 3 hours**

**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

**QUESTION 1**

- a) State and describe the roles of any **four** professionals involved in the building industry.  
(12 marks)
- b) List and describe **eight** types of drawings produced by the architect that may help you as a quantity surveyor in doing your job.  
(8 marks)

**QUESTION 2**

- a) The contractor is the person who does the actual execution of the works. Discuss the tendering process in which a contractor can win a job.  
(5 marks)
- b) The contractor has to make sure everything is in place on the site before work commences. Mention **ten** items the contractor will have to put in place to ensure the smooth flow of the construction process on site.  
(5 marks)
- c) Write brief notes on the storage of the following:
  - i. Timber
  - ii. Sanitary fittings
  - iii. Bricks
  - iv. River sand
  - v. Aggregate  
(10 marks)

**QUESTION 3**

- a) Define the following:
  - i. Foundation
  - ii. Back fill
  - iii. Bearing capacity

- iv. Settlement
- v. Dead load

(10 marks)

b) What are the functional requirements of a foundation?

(2 marks)

c) Name any **two** types of foundations that you know and describe with aid of sketches

(8 marks)

#### **QUESTION 4**

a) Name any **four** items of plant/equipment used on site and state whether they are movable or immovable.

(4 marks)

b) What is the purpose of site clearing?

(4 marks)

c) Discuss the advantages and disadvantages of working on a construction site in the CBD as compared to that in the outskirts

(8 marks)

d) What is a site plan and how does it help in the setting out of a building?

(4 marks)

#### **QUESTION 5**

a) What is the role of local authorities in the building industry?

(4 marks)

b) Name any **four** departments through which plans go through for approval in the local authority and state their roles

(4 marks)

c) Give **two** types of materials that could be used in wall construction and compare the two with aid of sketches.

(4 marks)

d) A wall has different functions. Mention and discuss what purpose they serve on the building.

(6 marks)

e) What is the purpose of a window?

(2 marks)

**END OF EXAMINATION**