

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF THE BUILT ENVIRONMENT
DEPARTMENT OF QUANTITY SURVEYING
BACHELOR OF QUANTITY SURVEYING (HONOURS) DEGREE
PART II SECOND SEMESTER EXAMINATIONS – AUGUST 2009

BUILDING CONSTRUCTION III – AQS2201

Instructions to candidates

Answer question 1 and any other three questions

Question 1

- (a) List five materials that can be used for damp proofing (5marks)
- (b) With the aid of diagrams discuss any two methods of waterproofing basements. (20 marks)
- (c) By giving examples distinguish between temporary and permanent exclusion of ground water (15marks)

Question 2

- (a) What is the importance of formwork in concrete work (5marks)
- (b) Outline the necessary requirements to be observed on formwork to justify its functionality. (5 marks)
- (c) Illustrate a typical detail of formwork arrangement on beam and slab (10 marks)

Question 3

- (a) Briefly explain how you can underpin a foundation using the traditional wall underpinning method (10 marks)
- (b) By giving examples differentiate the following construction plant
 - (i) Vibrators and power floats (4 marks)
 - (ii) Dumpers and back actor (4 marks)
 - (c) List two types of cranes (2 marks)

QUESTION 4

- (a) Identify and explain any four types of demolition methods that exist (12 marks)
- (b) Identify and explain with aid of diagrams the arrangement of any type of independent scaffolding. (8 marks)

QUESTION 5

- (a) Explain what is shoring and under what circumstances can it be considered
(5 marks)
- (b) You are employed by a construction company and your boss asks you to prepare a report on how to protect a wall from falling while creating an opening. With the aid of diagrams illustrate ways of temporarily supporting the wall from falling.
(15 marks)

END OF EXAMINATION