

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**FACULTY OF BUILT ENVIRONMENT**

**BACHELOR OF QUANTITY SURVEYING (HONOURS) DEGREE**

**PART II SUPPLEMENTARY EXAMINATIONS AUGUST 2011**

**BUILDING CONSTRUCTION II – AQS 2104**

**TIME:** 3 Hours

**TOTAL MARKS:** 100

**INSTRUCTIONS:**

**Answer all questions. Diagrams should be neat and well labelled.**

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**Question One**

- a) What is piling? (2 marks)
- b) Briefly describe how the following are sunk with the aid of diagrams giving at least 2 examples of each.
- i) Displacement piles. (10 marks)
- ii) Replacement piles (10 marks)
- c) What are the advantages of using precast concrete piles? (3 marks)

**Question Two**

- a) Briefly explain and illustrate the following:-
- i) Northlight roof (5 marks)
- ii) Monitor roof (5 marks)
- b) Illustrate a well detailed diagram of the junction of a reinforced concrete roof and external parapet wall with a precast concrete coping. (15 marks)

### **Question Three**

- a) State the four common types of staircases that exist. (4 marks)
- b) List the advantages and disadvantages of the following:-
  - i) In-situ concrete stairs (6 marks)
  - ii) Precast concrete stairs (6 marks)
- c) Illustrate diagrammatically a precast hollow floor (9 marks)

### **Question Four**

- a) What is cladding? (4 marks)
- b) List the materials that can be used on infill panels. (5 marks)
- c) Illustrate the sectional detail of vertical tile hanging. (6 marks)
- d) Illustrate and briefly describe the construction of a jointed suspended ceiling (10 marks)

**END OF EXAMINATION**