

# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

#### **FACULTY OF THE BUILT ENVIRONMENT**

#### **DEPARTMENT OF QUANTITY SURVEYING**

#### **BUILDING CONSTRUCTION**

#### **AQS2201**

**Main Examination Paper** 

**MAY 2015** 

This examination paper consists of 2 pages

Time Allowed: 3 hours

Total Marks: 100

**Special Requirements: Nil** 

Examiner's Name: Mr M Mukawa

# **INSTRUCTIONS**

- 1. Answer any four (4) questions
- 2. Each question carries 25 marks
- 3. Where information is insufficient, candidates should make stated assumptions

### **MARK ALLOCATION**

QUESTION	MARKS
1.	25
2.	25
3.	25
4.	25
5.	25

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### **Question One**

(a)	State four properties of an ideal damp proof material	[4]
(b)	Illustrate three levels on a building where damp proofing is required	[6]
(c)	Differentiate temporary and permanent ground water control	[5]
(d)	Discuss two methods of permanent exclusion of ground water	[10]

# **Question Two**

(a)	) With the aid of clearly labeled diagrams, compare and contrast asphalt tanking and dens	
	monolithic concrete basement construction methods	[20]
(b)	) State the advantages of drained cavity basement construction	[5]

### **Question Three**

(a) State the economic essentials of formwork	[5]
(b) Outline the precautionary measures in any demolition work	[5]
(c) Explain three methods of demolition	[15]

# **Question Four**

(b)	Briefly describe two ways of acquiring construction plant	[4]
(c)	Identify and discuss any three earthmoving/excavation plant clearly stating their	r uses
		[15]

(a) Explain the purpose of using construction plant/equipment on sites

### **Question Five**

(a) State three reasons of underpinning	
(b) Discuss, with the aid of diagrams, any one method of underpinning	[10]

(c) Discuss the method of temporarily supporting a building/structure which is showing signs of failure before correctional measures are carried out [9]

### **END OF EXAMINATION**

[6]