



**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**FACULTY OF THE BUILT ENVIRONMENT**

**DEPARTMENT OF QUANTITY SURVEYING**

**INTRODUCTION TO CONSTRUCTION MATERIALS II**

**AAR 1208**

**Main Examination Paper**

**May 2015**

This examination paper consists of 3 pages

**Time Allowed: 2 hours**

**Total Marks: 100**

**Examiner's Name: Mr M.Zhou**

**INSTRUCTIONS**

1. Answer any four (4) questions
2. Each question carries 25 marks

**MARK ALLOCATION**

<b>QUESTION</b>	<b>MARKS</b>
1.	25
2.	25
3.	25
4.	25
5.	25

### **QUESTION 1**

- a) Discuss the following terms in relation to plastering.
  - i. Efflorescence (2 marks)
  - ii. Suction (2 marks)
  - iii. Curing (2 marks)
- b) Outline the plastering process. (15 marks)
- c) Distinguish between plaster and mortar (4 marks)

### **QUESTION 2**

- a) Explain the components of paint. (10 marks)
- b) Briefly explain why Polyvinyl chloride (PVC) pipes are used in the construction industry to a greater extent as compared to other form of pipes (10 marks)
- c) Discuss the shortcomings of PVC as a construction material. (5 marks)

### **QUESTION 3**

- a) Discuss the various factors that are considered when deciding on floor and wall finishes for a building. (13 marks)
- b) Describe the manufacturing process of glass (12 marks)

### **QUESTION 4**

- a) Explain the difference between thermoplastics and thermo-setting plastics and also give examples of where they can be used. (10 marks)
- b) Giving practical examples, discuss the functions of paint in the built environment (7 marks)
- c) Discuss the defects that emanate from poor workmanship in painting (8 marks)

## **QUESTION 5**

- a) Describe any three different types of floor tiles (10 marks)
- b) With the aid of relevant examples, give any five types of glass that are used in the construction industry and places where they are used. (15 marks)