

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF ARCHITECTURE

BACHELOR OF ARCHITECTURAL STUDIES (HONOURS) DEGREE

2010-2011 ACADEMIC YEAR

PART I-SECOND SEMESTER EXAMINATIONS-MAY 2011

AAR 1204-INTRODUCTION TO MATERIALS AND CONSTRUCTION II

Instructions

Time: 2 hours

Answer all questions.

Illustrate your answers with sketches where appropriate.

QUESTION 1

- a. What factors are considered in selection of a type of wall finish? [5]
- b. A multi-storey office complex is to be built. The ground level is to house a shopping mall and the client wants it glazed. Advise the client on the different types of architectural glass available.[20]

QUESTION 2

- a. How do you improve the workability of natural bitumen asphalt.[10]
- b. What properties make asphalt a good building material.[5]
- c. Draw a typical section of a flat roof using asphalt.[10]

QUESTION 3

- a. State and explain components that constitute paint.[10]
- b. Discuss defects after painting.[10]
- c. Discuss preventive measures for corrosion on metals mainly used in construction. [5]

QUESTION 4

- a. State and compare the performance of materials that can be used to make pipes for building construction.[15]
- b. Explain the two major plastics used in construction.[10]