

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF ENVIRONMENTAL TECHNOLOGY
DEPARTMENT OF ARCHITECTURE

SECOND SEMESTER EXAMINATION FOR 2016/2017 SESSION

COURSE TITLE: CONSTRUCTION MATERIALS II

COURSE CODE: ARC 228

CREDIT UNIT: 2

TIME ALLOWED: 2 HRS

COURSE LECTURER: DR A. D. ISAH

HEAD OF DEPARTMENT: DR P. AYUBA

INSTRUCTIONS: Answer questions one and any other two questions. Be precise with your answers.

Q1. a. Describe briefly the process of performing cement test in a construction site.

b. Describe the following briefly

- i. Concrete curing process.
- ii. Reinforced concrete.
- iii. Precast and In situ concrete products.
- iv. Concrete mix ratio.
- v. List and describe any five (5) products of concrete building material.

20marks.

Q2. a. Briefly write short descriptions on the classifications of metal.

- i. State the existing classifications.
- ii. Give three (3) examples of each category and state their uses and applications.

b. Briefly outline and discuss the various jointing methods that are commonly applied to steel.

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Q3. a. Write briefly on the following

- i. Thermoplastics
- ii. Cellular Plastics
- iii. List five (5) plastic building materials and their uses.

b. Enumerate and discuss five (5) criteria that enable the choice of plastics as a building material.

20marks.

Q4. a. Discuss in summary the properties and application of Asphalt in construction.

b. Write briefly on the following

- i. Physical and Chemical properties of Asphalt
- ii. Bitumen
- iii. Asphalt emulsion

20marks.