

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

FIRST SEMESTER EXAMINATION 2017/2018 SESSION

COURSE CODE: ARC 218      UNITS: 1;      TIME ALLOWED: 1HR.30 MINS.

COURSE TITLE: CONSTRUCTION MATERIALS I

Head of Department: Dr. P. Ayuba

Lecturer: Arc. J. C. Eze

**INSTRUCTIONS:**

Attempt Question No.1 and Two Others (Three Questions in All) Each Question carries 20 marks.

- 1(a) How can Modern House be differentiated from Traditional Compound? 7.5 Marks
- (b) Write short note on any five construction materials you know, stating their applications in the building industries. 7.5 Marks
- (c) Discuss the importance of the following materials in traditional building construction.
- (i) West African Locust
- (ii) Shear Butter Trees 5 Marks
- 2(a) What is knot in timber and how can it be classified? 6 Marks
- (b) What is seasoning of timber? Enumerate its importance in building industry 6 Marks
- (c) Differentiate between the followings:
- (i) Check and Shake
- (ii) Hardwood and Softwood
- (iii) Live knot and Dead knot
- (iv) Sapwood and Heartwood 8 Marks
- (Good sketches attract marks)
- 3(a) What are the classifications of Natural Stone according to their geological formation? 5 Marks
- (b) Write on any one of the examples of a named stone that are formed as a result of breaking down of particles of older rocks by the action of water, wind, ice, or from accumulation of organic matter. 7.5 Marks
- (c) What are the uses of granite in the building Industry? 7.5 Marks
- 4(a) Define the term Cement. 2.5 Marks
- (b) Enumerate all types of cements you know and write short notes on any three. 9.5 Marks
- (c) With the aid of diagram, discuss the manufacture of cement. 8 Marks