

**FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI**  
**SCHOOL OF ENVIRONMENTAL TECHNOLOGY,**  
**DEPARTMENT OF BUILDING TECHNOLOGY**  
**Harmattan Semester Examination 2012/2013 session**

**Course title: Building Construction and Materials 1.**

**Course Code: BDT 201**

**Time: 2 ½ hours**

**INSTRUCTIONS: ANSWER ANY 5 QUESTIONS.**

- 1a. Briefly classify and explain the various groups of building stones in the construction industry.
- b. Explain the methods of quarrying of stones used in construction.
- 2a. List and explain the various characteristics of timber used in the building construction industry.
- b. Write short notes on the terms seasoning and preparation of timber.
- 3a. Define cement as a construction material and also explain principle of hydration in cement hardening.
- b. Explain the manufacturing process of ordinary Portland cement.
- 4a. List and explain the reasons for defects in walls.
- b. List the requirements of a functional wall.
- 5a. Assuming a building contract is awarded to you as a contractor\builder to erect a 4 bedroom bungalow, briefly explain the steps you will take to bring this building to finishing level.
- b. State what characteristic determines the selection of a building site.
- 6a. With the aid of sketches explain the various types of foundations you know.
- b. State the primary aim of the design of foundations in building construction.
- c. What are the functional requirements of building foundations.

