FEDERAL UNIVERSITY OF TECHNOLOGY MINNA SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION DEPARTMENT OF INDUSTRIAL TECHNOLOGY EDUCATION 2017/2018 SECOND SEMESTER EXAMINATION

Course Code: BUD 522

Course Title: Building Site Practice

Instruction: Answer any four questions Time: 2 hours

- 1. Test on fresh and hardened concrete can be carried out in the laboratory. Write a step by step procedure on the following:
 - a. Compacting factor test
 - b. Compressive strength test
 - c. Slump test
 - d. Indicate the acceptable range or formula for computing the result of the above 3 tests.
- 2. Quality control is a vital aspect of concrete production process and to ensure this certain tests should be carried out on the aggregate before mixture.
 - a. Identify 5 categories of tests
 - b. Justify the need for this test with 5 factors
 - c. Mention 6 types of concrete as specified in CP110 for ordinary structural concrete
 - d. From c above categorize the grades into weight batching and volume batching
- 3. Write short notes on the following:
 - a. Building line
 - b. Datum level
 - c. Construction method testing
 - d. Destructive and non destructive testing
 - e. Quality control
- 4. a. Itemize 10 operational sequences involved in setting out a building
 - b. Compile a list of 10 equipment and tools you need to carry out the setting out of a simple building using 3:4:5 method.
- 5. In a construction site, concrete can be produced in 6 operational sequences
 - a. Mention these 6 operational sequences
 - b. Briefly explain each of the operations, its importance and methods
 - c. Itemize 3 tools /machines that are required in each of the operation