

**FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI**  
**SCHOOL OF ENVIRONMENTAL SCIENCES**  
**ARCHITECTURE DEPARTMENT**  
**2014/2015 RAIN SEMESTER EXAMINATIONS.**

Course title: - WATER SUPPLY AND DRAINAGE

Course code: - ARC 524

Time Allowed: - 2 HOURS

Date: - Tuesday August, 25<sup>th</sup> 2015

Mark: - 70%

**Instruction: Attempt all questions. ALL QUESTIONS CARRY EQUAL MARK!**

1. a. What are the causes of breakage of water seal?  
b. With the aid of a well annotated diagram, explain the various traps we have.
  
2. a. In a construction site where there is a high water level challenge, illustrate ways of controlling the level of water on the site.(must be cost effective.)  
b. with the aid of sketches, discuss the following:-
  - i. Drainage system
  - ii. Septic tank and soak away pit.
  
3. a. Discuss briefly the following:-
  - i. supply pipe
  - ii. service pipe
  - iii. bucket pumps
  - iv. cistern
  - v. distribution pipe  
b. State the advantages and disadvantages of the indirect supply to a two (2) storey building.  
c. what causes the contamination of water. Discuss briefly the measure(s) put in place to check this phenomenon in mains supply.
  
4. a. Illustrate any two (2) rural water supply system. Show sketches.  
b. Discuss the cold water distribution pipe system for a two (2) storey building.

GOODLUCK!!