FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA SCHOOL OF ENVIRONMENTAL TECHNOLOGY DEPARTMENT OF QUANTITY SURVEYING FIRST SEMESTER EXAMINATION 2018/2019 SESSION

COURSE: CIVIL ENGINERRING CONSTRUCTION II

COURSE CODE: OTS 415

INSTRUCTION: ANSWER ALL QUESTION

TIME: 2hrs.

1. What are the requirements that must be followed in order to protect the sewerage system?

- 2. State two advantages and disadvantages of tunnel operations
 - 2b. Before any tunneling operation can begin, there are numerous factors that require detail investigation. Enumerate them.
- 3. List three (3) main objectives of providing ventilation system in tunnel 3B. why is lighting required in a tunnel and where are they essential
- 4. Briefly explain what you understand by CATHODIC PROTECTION, and state two conditions under which it can be applied to pipelines.
- 5. With the aid of a diagram briefly explain three types of railway sleeper you know
- 6. Highlight the TWO most important factors to consider in positioning a Seawall.
- 7. Explain what you understand by the following types of dams
 - i. Arch dam
 - ii. Rock fills dam
 - iii. Steel dam