FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF ENVIRONMENTAL TECHNOLOGY
DEPARTMENT OF QUANTITY SURVEYING

170 ✓

SECOND SEMESTER EXAMINATION 2017/2018 SESSION

COURSE CODE: *QTS 323* **COURSE TITLE**: *CIVIL ENGINEERING CONSTRUCTION I*

TIME ALLOWED: 2 *Hours* **CREDIT LOAD**: *2 Units*

INSTRUCTION: *Answer **Six (6)** Questions* Only

Q1. With the aid of diagram only explain the processes involved in lowering water table to a level below formation of excavation?.

Q2. Basically six (6) acceptable factors have been identified in designing the sloping sites of an embankment profile. Enumerate these factors?

Q3. The choice of method of ground water control will depend on the type of soil involved and the depth to which the ground is to be excavated – explain based on your understanding of it as discussed in QTS 323 class?.

Q4. Briefly outline the basic aim of site investigation?

Q4b. The practical outcome of site investigation depends upon certain factors. Outline those factors?

Q5. Two principle methods are employed for the compaction of the ground. Explain the two methods.

Q6. Write short note on:

a. Earthwork in road construction
b. Subgrade strength in road construction
c. Subsoil drainage in road construction

Q6b. With aid of a diagram only show the use of sub – soil to intercept ground water?.

Q7. Differentiate between cofferdam and caisson?.

Q7b. In cofferdam construction, the type of cofferdam and material depends upon certain factors. Outline those factors?

Q8. Briefly outline the factors associated with the selection of suitable cofferdam for a specific problem.