



# FACULTY OF ENGINEERING

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

B.Sc. (Civil Engineering) Degree Examination

Second Semester 2017/2018 Session

CVE 528: Construction Engineering

August 2018

Instruction: Attempt Four Questions.

Time Allowed: 2 hrs 30 mins

## QUESTION 1 (15 marks)

- a) Define Construction Engineering **2 Marks**
- b) Who is a Construction Engineer and what does he do? **3 Marks**
- c)
  - i. Briefly explain the term "Construction Technology". **2 Marks**
  - ii. What does a Construction Engineering Manager do? Enumerate the consideration that must be considered to enable them estimate the total cost of a project. **8 Marks**

## QUESTION 2 (15 marks)

- a) Explain the term "Earthmoving" in Construction Engineering processes. **4 Marks**
- b) Discuss in details the basic considerations for equipment selection for construction purposes. **5 Marks**
- c) List six major types of earthmoving equipment being used in construction industry. **6 Marks**

## QUESTION 3 (15 marks)

- a)
  - i. Define the term "Retaining wall" **2.5 Marks**
  - ii. Briefly explain the uses of retaining wall. **2.5 Marks**
- b) With a suitable schematic diagram, write a short note on four types of Retaining wall. **10 Marks**

## QUESTION 4 (15 marks)

- a)
  - i. Write short note on preparing for work as one of the basic principles relating to maintenance, risk and safety. **3 Marks**
  - ii. Gathering as much health and safety information about the project and the proposed site before work begins is important. List eight sources of information needed during the tendering stages and before the commencement of the job. **8 Marks**