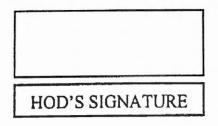


# FACULTY: ENGINEERING DEPARTMENT: CIVIL ENGINEERING SECOND SEMESTER EXAMINATION (JULY 2017) 2016/2017 ACADEMIC SESSION

**Course Title: HYDROLOGY** 

Course Code: CVE 304



Instructions:

- 1) Answer questions 1 and any other three (Use necessary equations and expressions)
- 2) Time Allowed: 2 hours
- 3) SEVERE PENALTIES APPLY FOR MISCONDUCT, CHEATING, POSSESSION OF UNAUTHORIZED MATERIALS DURING EXAM

# DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

## FACULTY OF ENGINEERING

#### Second Semester 2016/2017 Session

#### **CVE 304: HYDROLOGY**

#### Second Semester Examination

#### Time Allowed: 2 hours

Instruction: Answer questions 1 and any other three (Use necessary equations and expressions)

### **QUESTION 1 (30 Marks)**

- a) Write a detailed note on hydrology (the note must include definition, history of hydrology, precipitation etc.). (5 marks)
- b) Figure Q1 shows a brief summary of the hydrological cycle. Label the diagram (i to x) appropriately as required. (5 marks)
- c) What is an hydrograph? (5 marks)
- d) Table Q1 presents rainfall in a selected location using different rain gauges. Using the table, answer the following:
  - a. Determine arithmetic mean of the rainfall.(5 marks)
  - b. Mean rainfall using Thesis Method. (5 marks)

Table Q1: Rainfall data from selected rain gauges

Rain gauge	A	В	C	D	Е	F
Depth of Water (mm)	8.81	12.15	15.26	1.18	5.62	9.80
Catchment Area (m <sup>2</sup> )	65.00	150.60	269.78	216.98	56.99	136.67