



ELIZADE UNIVERSITY
FACULTY OF BASIC AND APPLIED SCIENCES

DEPARTMENT: PHYSICAL AND CHEMICAL SCIENCES

PROGRAMME: APPLIED GEOPHYSICS EXAM TITLE: DEGREE EXAMINATION

COURSE CODE & TITLE: AGY 403 – ENGINEERING GEOLOGY

TIME ALLOWED: 2 hrs 30 mins SEMESTER/SESSION: FIRST / 2020/2021

INSTRUCTIONS: Write your matriculation number on the cover page of the exam booklet.
Answer THREE (3) QUESTIONS (Question No. 1 is compulsory)

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HOD's SIGNATURE

1.
 - (a) List the three major soil classification systems and explain one?
 - (b) Define and outline the index properties of soil
 - (c) A soil sample in its undisturbed state was found to have volume of 105cm^3 and mass of 201g. After oven drying the mass got reduced to 168g. Compute:
(i) water content (ii) Dry density (iii) void ratio. Take $G = 2.7$

2.
 - (a) Discuss the importance of Engineering Geology.
 - (b) Define the following Atterberg limits:

(i) Liquid limit	(iii) Plastic limit
(ii) Plasticity index	(iv) Shrinkage limit

3.
 - (a) What is engineering property of rock.
 - (b) Discuss four factors that influences the engineering properties of rocks
 - (c) Enumerate six properties of engineering properties of rocks

4.
 - (a) What is site investigation.
 - (b) Discuss the objectives of site investigation.
 - (c) Define the following geological cycle events:

(i) Weathering	(iii) Deposition
(ii) Transportation	(iv) Upheaval