



ELIZADE UNIVERSITY, ILARA MOKIN  
FACULTY OF BASIC AND APPLIED SCIENCES

DEPARTMENT OF PHYSICAL AND CHEMICAL SCIENCES

A handwritten signature in black ink, appearing to read 'C. A. F. 2020', enclosed in a rectangular box.

FIRST SEMESTER EXAMINATIONS 2019/2020

COURSE CODE: AGY 401

CREDITS: 2

COURSE TITLE: PETROLEUM GEOLOGY

TIME ALLOWED: 2HRS

INSTRUCTION: Answer three Questions, Question No. 1 is Compulsory.

TOTAL MARKS: 60

- 1a) With a well labeled diagram, describe the different stages involved in the transformation of Organic matter to hydrocarbon. 10 marks
- b) Write succinctly on Petroleum source beds and Kerogen types. 10 marks
- 2a) Differentiate between Petroleum Pool and Petroleum Fields. 6 marks
- b) Describe the geological factors that favored the subsurface accumulation of hydrocarbon in the Niger Delta Basin. 14 marks
- 3) Write concisely on Oil Shale and Oil Disseminated Deposits as forms of surface occurrence of hydrocarbon. 20 marks
- 4a) Enumerate the properties of a Reservoir rock. 5 marks
- b) What are Petroleum traps? 10 marks
- c) Outline the functions of drilling mud. 5 marks
- 5a) With the aid of appropriate diagram, describe the trapping mechanisms in Niger Delta. 10 marks
- b) According to Doust and Omatsola (1990), discuss the three depobelts provinces of Niger Delta. 10 marks