

FACULTY OF BASIC AND APPLIED SCIENCES DEPARTMENT OF PHYSICAL AND CHEMICAL SCIENCES

FIRST SEMESTER EXAMINATONS 2018/2019

1

COURSE CODE: AGY 401

UNITS: 3

COURSE TITLE: PETROLEUM GEOLOGY

TIME ALLOWED: 2HRS

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

TOTAL MARKS: 60

- 1). With the aid of a schematic diagram describe the transformation of organic matter into petroleum.
 - 2). Account for the following in the hydrocarbon habitat of Niger Delta Oil Province:
 - a) Depobelts. b) Growth Fault and Collapsed Crest Structures.
 - 3). Write concisely on Oil Shale and Oil Disseminated Deposits as forms of surface occurrence of hydrocarbon.
 - 4). Write short notes on the following forms of Crude Oil:
 - i) Paraffinic Base
 - ii) Naphtenic Base
 - iii) Aromatic Base
 - iv) Asphatic Base
 - 5). With the aid of a schematic diagram describe the relationship between buoyancy and stratigraphic barrier in hydrocarbon trap formation.
 - 6). Explain in detail the term 'Hydrocarbon Migration' and Geologic Framework associated with migration.