

DEPARTMENT OF CHEMISTRY
OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE, NIGERIA.

2021/2022 RAIN MID-SEMESTER EXAMINATION
ICH 202: PETROLEUM AND ENVIRONMENTAL CHEMISTRY

INSTRUCTION: Attempt ALL questions
Date: 28th April 2023

Time Allowed: 30 minutes

- 1(a) What is the difference between crude oil and condensate? ✓
- 1(b) What are the main product(s) in each stage of evolution of organic matter in sedimentary rock? ✓
- 1(c) Explain by chemical equation(s) the reforming of cyclohexane to benzene. ✓
- 1(d) Why are residues not produced during hydrocracking? ✓
- 1(e) Explain by chemical equations the complete conversion of hydrogen sulphide into elemental sulphur.
- 1(f) Why are asphaltenes not desirable in the refinery? ✓

Handwritten notes:
 - Hydrocarbons that are liquid and remain viscous liquid at atmospheric pressure
 - This is a chemical mixture of heavy mass from gas that has been liquified but turned to liquid at atmospheric condition

Handwritten note for (b):
 - Plants turn to coal through to crude oil and petrochemical materials

Handwritten note for (f):
 - The asphaltenes are solid petroleum - they are related to oil and are a liquid

Handwritten notes:
 H_2O
 H_2S

