



CRAWFORD UNIVERSITY
COLLEGE OF NATURAL AND APPLIED SCIENCE
DEPARTMENT OF PHYSICAL SCIENCES
INDUSTRIAL CHEMISTRY
RAIN SEMESTER EXAMINATION 2019/2020 SESSION

COURSE CODE: 206

COURSE TITLE: INDUSTRIAL CHEMISTRY

UNITS: 2

TIME ALLOWED: 2 HOUR

- 1) A) Natural resources can be characterized into four states, list and explain. (8 marks)
B) Mention 3 industrial gases and state its use (3 marks)
C) Explain two approaches to the management and administration of natural resources in Nigeria (4 marks)
- 2) A) Mention five factors to be considered when determining labor requirements for establishment of a chemical industry (5 marks)
B) Describe a method that can be used for the extraction of gold (4 marks)
C) Give a survey of raw materials need, locations and products of three chemical industries in Nigeria. (6 marks)
- 3) A) Describe explicitly the environmental effect of chemical industries that uses cadmium, copper II sulphate and methanol as raw materials. (6 marks)
B) Enumerate seven basic requirements for setting up a chemical industry. (7 marks)
C) State two environmental effect of oil and gas industries in Nigeria (2 marks)
- 4) A) List five examples of transfer of mass within a fluid mixture or across a phase boundary (5 marks)
B) List the three categories of products that can be obtained from a chemical industry and give two examples each (6 marks)
C) Enumerate four economic importance of chemical industries (4 marks)
- 5) A) Explain the three different modes of mass transfer (6 marks)
B) Describe the structure of global chemical industries (5 marks)
C) Describe a physical process of unit operation of a sugar manufacturing industry (4 marks)
- 6) A) Enumerate four importance of research and development in chemical industries (4 marks)
B) Explain the importance and sources of capital for chemical industry (6 marks)
C) What is chemical industry? Give six classes of chemical industry (5 marks)