



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
MARCH/APRIL 2016 EXAMINATION

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE:
COURSE TITLE:

CHM304
COLOUR CHEMISTRY AND TECHNOLOGY

CREDIT UNIT: 2

DURATION:

2 HRS

INSTRUCTION: *Answer any 4 questions*

1. (a) How would you explain the concept of colour? Where does colour come from? 10 ½ mks
(b) What do you understand by Electromagnetic spectrum (EMS)? 7mks
2. (a) On the basis of wavelength, classify EMR. 7mks
(b) In a tabular form, identify the colours of the spectrum and their respective wavelength and frequency ranges. 10 ½ mks
3. (a) What are pigments and what striking features do they possess? 13 ½ mks
(b) When an object is exposed to light, what are the likely things that will occur? 4mks
4. In terms of special properties or behaviors of pigments, differentiate between inorganic, classical organic, specialty organic pigments and dye stuffs. 17 ½ MKS
5. (a) List the primary types of agricultural industries that use dyes. 3mks
(b) Why the use of dyes in the agricultural industry and on what does selection criteria depend? 7mks
(c) Mention 3 pigments excluding manganese violet and iron blue, used in the cosmetic industry, their features and applications. 7 ½ MKS
6. Explain the Retting process and its types. 17 ½ mks