



National Open University Of Nigeria
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Science

October/November 2016 Examination

COURSE CODE: CHM 304

COURSE TITLE: COLOUR CHEMISTRY AND TECHNOLOGY

CREDIT UNIT: 2

DURATION: 2 HRS

INSTRUCTION: *Answer any 4 questions*

1. (a) How can the colour of dyes be altered? 4mks
(b) Show systematically or stepwise an example of the alteration of a dye colour. 8mks
(c) What is an Auxochrome? 5 ½ mks
2. (a) In a tabular form, identify the types of dyes and fabric they are applied on (at least one fabric). 10mks
(b) Describe the typical process of pigment dyeing of cellulosic textile materials. 7 ½mks
3. (a) What are the properties of coloured pigments used in the Cement Industry? 4mks
(b) Discuss how the pigments used in the Cement Industry are obtained. 13 ½ mks
4. Write short notes on the following:
(a) Vat dyes 6mks
(b) Mordant dyes 11 ½ mks
5. (a) On the basis of application, highlight the classes of dye. 10mks
(b) State the uses of five of the classes. 5mks
(c) Define the term 'fibre'. 2 ½ mks
6. (a) Write briefly on the extraction of bast fibres. 9 ½ mks
(b) How many forms of retting exists? Discuss. 8mks