

THE OPEN UNIVERSITY OF SRI LANKA

BACHELOR OF TECHNOLOGY/ BACHELOR OF INDUSTRIAL STUDIES.

FINAL EXAMINATION- 2011/2012

TTX6231 – ADVANCE COLORATION

DURATION – THREE HOURS



DATE: 14th MARCH 2012

TIME: 14.00 – 17.00 HOURS

Please write your Registration number on the dotted line given below:

Reg. No.:

Total number of questions is 10. Total number of questions to be answered is 06. Question number one is compulsory and carries 25 marks. All other questions carry (15) marks each.

Part 1
Compulsory question

Q1. (a) Classify acid dyes into three (03) classes according to their application.

(03 Marks)

- (I) -----
- (II)-----
- (III) -----

b) Name three (03) reactive groups found in reactive dyes?

(03 Marks)

- (I) -----
- (II)-----
- (III)-----

c) Give two reasons as to why polyesters are difficult to dye?

(02 Marks)

- (I) -----
- (II)-----

d) Name the main steps involved in 'Azoic dyeing'?

(03 Marks)

e) What are the three (03) types of mordant dyes?

(03 Marks)

(I)

(II)

(III)

f) Explain the term colour fastness in your own words?

(03 Marks)

g) What are the main classes of vat dyes?

(03 Marks)

h) What do you understand by mordanting?

(03 Marks)

i) Mention two (02) fastness properties you should look in a swim wear?

(02 Marks)

(I)

(II)

Part 2

Answer any five (05) questions from Q2 to Q10

2. Explain how you would carry out dyeing with basic dyes. (15 Marks)
3. Explain types of mordant dyes and their applications. (15 Marks)
4. Mention the important tests for colour fastness and explain two of them in detail. (15 Marks)
5. Explain how you would apply vat dyes to a fabric. (15 Marks)
6. Explain the polyester dyeing process in detail. (15 Marks)
7. Briefly explain the methods available to dye cellulose fibres with reactive dyes. (15 Marks)
8. Write short notes on : (15 Marks)
 - a) Carrier dyeing
 - b) Gas fading
 - c) High temperature dyeing
- 9.) Explain the method of application of acid dyes. (15 Marks)
- 10.) Write an essay on dyeing fibre mixtures. (15 Marks)