

THE OPEN UNIVERSITY OF SRI LANKA

DIPLOMA IN TECHNOLOGY/ DIPLOMA IN INDUSTRIAL STUDIES

TTX 4234/TTD2234 - TEXTILE COLOURATION AND FINISHING

FINAL EXAMINATION- 2009/2010

DURATION- THREE HOURS



Date: 01st^h March 2010

Time: 0930-1230 Hrs

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

01. Compulsory question

(Answer all parts. Each part carries 2.5 marks amounting to a total of 25 marks)

01. What is the function of levelling agents?
02. State the function of mordants?
03. Give two reasons as to why the reactive dyes are very popular.
04. Name three fibres that can be dyed with disperse dyes.
05. State three styles of printing.
06. Mention why humectants are necessary in a printing paste.
07. State two advantages of transfer printing.

08. Explain the term "Shearing"
09. Briefly describe what "Singeing" is.
10. What is the purpose of sanforising?
02. With the aid of simple line diagrams explain one type of machine for dyeing EACH of
(a) Loose fibre (b) yarn (c) fabric.
03. a) Discuss both advantages and disadvantages of using natural dyes in dyeing of textile material.
b) Write short notes on the following :
(I) Mordants (II) Carriers (III) Levelling agents.
04. Explain the dyeing methods that can be employed in dyeing polyester fibres.
05. Briefly explain the printing styles you have studied in your lessons.
06. Explain step by step, how a two colour design is printed on a cloth by hand printing method.
07. What are the dyestuff and substrate characteristics required for transfer printing?
Explain the transfer printing process.
Discuss the disadvantages and advantages of transfer printing.
08. (a) Describe how the mechanical finishing process differs from chemical finishing processes?
(b) Outline the essential features of (1) singeing (2) stentering (3) calendaring
09. Explain the principles involved in any three textile drying systems (other than microwave drying) you are familiar with.
Describe the principles involved in microwave drying systems and give its advantages over convection drying systems.
10. (a) "Crease resistance properties of wool is very much better than that of cotton". Explain why.
(b) Explain the types of crease resist finishes that can be applied on cellulose.