

Master of Design (M.Des.) Textiles Examination 2017

Semester – II

Paper MTD – II/03

Technology of Dyeing and Printing

Time: 3 Hrs

Full Marks: 40

Questions are of value as indicated in the margin

Question number 1 is compulsory and answer any four from the rest

1. (i) Define the following terms: a) Dye and Pigment, b) Dyeing and Printing 2x6 = 12
(ii) Explain the role of dispersing agents in polyester dyeing
(iii) Define Hue, Chroma, K/S, Metamerism
(iv) Explain the properties of cotton fabric which changes due to mercerization
(v) What precautions will you take for scouring and bleaching of a white cotton fabric with coloured border or checks?
(vi) Explain the objectives of heat setting of polyester fabrics.
 2. (i) What is care labelling? Mention the basic symbols used for: wash, bleach, iron and dry clean. 2+2
(ii) Discuss in brief the methods for assessing colour fastness to light of a dyed textile substrate. 3
 3. (i) Explain the mechanism of application of sulphur dye on cotton. 3
(ii) What is bronziness of sulphur dyed goods and how can it be prevented or corrected? 4
 4. (i) Explain the advantages and drawbacks of natural dyes. 3
(ii) What is mordant and discuss in brief different mordanting methods used for dyeing of textiles with natural dyes. 4
 5. (i) What are the advantages and limitations of computerised colour matching system? 3
(ii) What is whiteness and Yellowness Index? Define the term 'L', 'a' and 'b' 2+2
 6. What are the methods available for dyeing polyester fibre with disperse dyes? Describe any one commercial method mentioning the function of chemicals and auxiliaries used in such process. 3+4
 7. (i) Explain style and methods of printing. 2
(ii) What do you mean by 'Khadi Print'? What type of pigment is used as 'Khadi'? Give example. What are the advantages of Khadi Print? 1+1+1+2
 8. (i) What are the functions of the following chemicals used in printing? 2+2
(a) Sodium nitrite in solubilised vat printing
(b) Resist salt in Reactive colour printing
(ii) What is synthetic thickener? State the advantages of synthetic thickener. 3
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