17564

15116

3 Hours / 100 Marks Seat No. | | | | | | | | |

Instructions : (1) All Questions are *compulsory*.

(2) Answer each next main Question on a new page.

(3) Illustrate your answers with neat sketches wherever necessary.

(4) Figures to the right indicate full marks.

(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any FIVE : **5 × 4 = 20**

(a) Give the classification of disperse dyes with suitable examples.

(b) Write down the procedure for dyeing of Acrylic with Basic dyes.

(c) Write down any two physical and two chemical properties of Nylon.

(d) Explain one bath dyeing process for polyester/cotton blend fabric.

(e) State the importance of computer colour matching in fabric dyeing.

(f) Write down the advantages and limitations of soft flow dyeing machine.

(g) Give the comparison between batch-wise processing and continuous processing machineries for textiles.

2. Attempt any TWO : **2 × 8 = 16**

(a) Explain in detail high temperature high pressure dyeing of polyester in jet dyeing machine with the principle and working conditions to be maintained for proper dyeing. Write its advantages and limitations also.

(b) Describe different dyeing methods for acrylic yarns with their advantages and limitations.

(c) Describe in detail the dyeing method for polyester/wool blend fabrics. Write down the working procedure and precautions during the dyeing process.

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3. Attempt any FOUR : **4 × 4 = 16**

(a) Write about the effect of pre-treatments and heat setting on dyeing behaviour of polyester fabric.

(b) Write down the properties of cationic dyes and explain any one method for stripping of cationic dyes.

(c) Write down the procedure for dyeing of Nylon with reactive dyes.

(d) Write down any two faults and their remedies of yarn dyeing in hank form.

(e) Explain the working principle of Jet dyeing machine.

(f) State the importance of padding mangle machine in textile processing with its advantages and limitations.

4. Attempt any FOUR : **4 × 4 = 16**

(a) Explain the concept of rapid dyeing techniques for polyester fabrics.

(b) Write down the physical and chemical properties of Acrylic fibre.

(c) What is the function of levelling agents in dyeing ? Enlist the names of levelling agents with their properties.

(d) Describe the dyeing method for nylon/cotton blend fabric.

(e) Explain the working of soft flow dyeing machine with its various applications.

(f) Describe continuous dyeing range (CDR) machine for textiles with its advantages.

5. Attempt any TWO : **2 × 8 = 16**

(a) Describe in detail the principle of Thermosol dyeing of polyester. Write about the precautions and working conditions to be maintained during Thermosol dyeing. Write about faults and remedies for this process.

(b) Describe in detail the dyeing of Nylon with Acid dyes. Write down the properties of acid dyes. Identify faults and remedies in this dyeing.

(c) Describe the dyeing of polyester yarn in package form in H.T.H.P. package dyeing machine. Write its advantages and limitations.

6. Attempt any FOUR : **4 × 4 = 16**

(a) Write down the properties of disperse dyes and enlist the auxiliaries used in disperse dyeing of polyester with their functions.

(b) Describe the carrier method of dyeing for acrylic fabrics.

(c) Explain the dyeing procedure for polyester/acrylic blend fabric.

(d) Describe construction and working of H.T.H.P. beam dyeing machine.

(e) Explain about new developments in textile dyeing machineries with examples.

(f) Explain about the fastness properties after fabric dyeing and their importance.

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