

22576

12425

03 Hours / 70 Marks

Seat No.

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- Instructions* –
- (1) All Questions are *Compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answer with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Assume suitable data, if necessary.
 - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following: 10**
- a) Draw the process flow for pretreatment of polyester fabric.
 - b) List the print paste ingredients used for disperse dyes by select style of printing.
 - c) State two advantages and two limitations of disperse vat system.
 - d) Enlist the Dyes used for printing of Acrylic fabric.
 - e) List the selection criteria of Dyes for printing of Nylon fabric.
 - f) State the importance of pretreatments in printing of Nylon fabric.
 - g) Enlist the various methods of transfer printing.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Describe the selection criteria of Dyes for printing of PLC blended fabric with disperse/reactive system by direct style.
 - b) State the fixation parameters for various print fixation methods in fixation of polyester printed fabrics.
 - c) Describe pigment printing process for PLC blended fabric.
 - d) Describe the process for printing of Acrylic with cationic dyes.
- 3. Attempt any THREE of the following:** **12**
- a) Describe the selection criteria of thickness for polyester printing based on fixation methods.
 - b) Describe the process for printing of polyester/wool blended fabric with dispersed acid dyes by direct style.
 - c) Explain limitations of printing of Nylon with Disperse Dyes.
 - d) Describe the characteristics of transfer printing paper.
- 4. Attempt any THREE of the following:** **12**
- a) Describe Nylon printing process with metal complex dyes.
 - b) Describe Gravure printing method for printing of transfer paper.
 - c) Explain characteristics of transfer printing ink.
 - d) Describe the classification of inkjet printing methods.
 - e) Draw a labelled line diagram for drop on demand method of inkjet printing and write the printing principle.
- 5. Attempt any TWO of the following:** **12**
- a) Elaborate the print paste formulation and state the process sequence and fixation conditions for direct, discharge and resist style of printing of polyester.
 - b) Plan a method/process of single dye application on PET/cotton blended fabric using polystyrene dyes.
 - c) Establish the relation between the dye class and print fixation methods in the printing of acrylic fibres using different class of dyes.

6. Attempt any TWO of the following:**12**

- a) Elaborate the printing stages of polyester fabric with process conditions and justification.
 - b) Assess the technical features, production capacity, advantages and limitations of continuous transfer printing machine for polyester fabrics.
 - c) Differentiate between Digital Printing and Conventional printing (Any six points).
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