24225 3 Hours / 70 Marks

Seat No.								
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Instructions:

- (1) All Questions are *compulsory*.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data, if necessary.

Marks

1. Attempt any FIVE of the following:

10

- (a) State the importance of heat-setting of polyester before printing.
- (b) List out combination of dye systems used for printing PET/Cotton blended fabric.
- (c) State the principle of "Brasso" style of printing.
- (d) List out different methods of print fixation on acrylic fabric.
- (e) Enlist different types of transfer printing.
- (f) Classify inkjet printing techniques.
- (g) State two major advantages of transfer printing.

2. Attempt any THREE of the following:

12

- (a) Explain the importance of fabric preparation before printing in brief.
- (b) Demonstrate the procedure for single dye application on PET/Cotton blended fabric.
- (c) Explain the selection criteria of dyes for acrylic based on print fixation method.
- (d) Enlist the essential characteristics of a paper used in transfer printing.



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12 3. Attempt any THREE of the following: Explain the print fixation mechanism during pressure steaming of polyester. (a) Explain the mechanism of Brasso style of printing on PET/Cotton blended (b) fabric. Mention names of suitable chemicals for Brasso printing. (c) Describe direct style of printing on acrylic fabric with typical formulation. Illustrate, Flexographic transfer paper printing technique with neat sketch. (d) 4. 12 Attempt any THREE of the following: Explain direct style of printing on polyester with suitable formulation for (a) atmospheric steaming fixation method. Explain the principle and selection criteria of polyester/cellulosic blend (b) composition for carbonized prints. Elaborate technical features of continuous fabric transfer printing machine. (c) (d) Illustrate, Drop on demand inkjet printing with a neat sketch. Describe the characteristics of inks for digital printing. (e) 5. 12 Attempt any TWO of the following: Enlist the ingredients of printing paste formulation for discharge printing on (a) polyester and state the precautions taken during discharge printing. With a typical print paste formulation describe the process of pigment printing (b) on PET/Cotton blend and explain the mechanism of pigment print fixation. (c) Describe the procedure to develop the prints by direct style using acid dyes on nylon fabric. 6. Attempt any TWO of the following: 12 Illustrate the working of vapour phase transfer printing with neat labelled (a) diagram. (b) Compare inkjet printing with conventional printing on any six points. Enlist the print paste ingredients with their role for printing of (c) PET/Cotton blend with disperse/reactive dye system. (ii) State the print paste ingredients with their role for nylon printing with

metal complex dye.