

314356

12526

3 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 answers with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) Assume suitable data, if necessary.
(6) 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) State the importance of heat setting.
 - b) List out the stages involved in printing.
 - c) List out the different dye combinations used for printing of PET/cotton blend.
 - d) State advantages of blending.
 - e) Enlist different print fixation methods for acrylic fabrics.
 - f) List out different dye classes used for nylon printing.
 - g) Enlist the different types of transfer printing.

P.T.O.

- 2. Attempt any THREE of the following : 12**
- a) Explain the importance of fabric preparation before printing of polyester.
 - b) With typical print paste formulation explain a method of printing polyester/cotton blend by single dye application.
 - c) Select relevant print paste formulation for printing of acrylic fabric using disperse dye by high temperature - high pressure Steaming method.
 - d) Enlist the characteristics of transfer printing paper.
- 3. Attempt any THREE of the following : 12**
- a) Suggest the selection criteria of various thickeners for fixation of polyester printing.
 - b) Describe pigment printing of PET/Cotton blend with typical print paste formulation.
 - c) State the major advantages and disadvantages of transfer printing.
 - d) Explain the concept of digital printing.
- 4. Attempt any THREE of the following : 12**
- a) State the properties and selection criteria of disperse dyes based on print fixation methods.
 - b) Describe method of printing polyester/wool blend using disperse/acid dye combination.
 - c) With typical printing recipe explain printing of nylon using acid dyes with its process sequence.
 - d) With a neat diagram explain working of Lithographic printing.
 - e) State and explain the technical features of DOD ink-jet printing.

5. Attempt any TWO of the following : 12

- a) Produce white and colour discharge effects on solid shade dyed polyester assuming suitable conditions.
- b) Select a suitable principle, mechanism and method to produce a brasso style of prints on the polyester/acrylic blended fabric.
- c) Select a suitable print paste formulation and process sequence for printing of nylon with metal complex dye by direct style.

6. Attempt any TWO of the following : 12

- a) Draw neat diagram of vapour phase transfer printing machine and label the following parts –
 - i) Transfer paper
 - ii) Fabric to be printed
 - iii) Blanket
 - iv) Back paper
 - v) Hot cylinder and
 - vi) Used paper
 - b) Distinguish between digital printing and conventional printing w.r.t. –
 - i) Production speed (m/min)
 - ii) Space requirement
 - iii) Pollution
 - iv) Colour depth and brightness
 - c)
 - i) State the advantages and limitations of printing P/C blend with disperse/reactive combination.
 - ii) State the characteristics of disperse dye, ink used in transfer printing.
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