# 22576

## 24225 3 Hours / 70 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) 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 objective of heat-setting.
- b) Listout various stages involved in printing.
- State the different dye combinations or systems used for printing PET/Cotton blend.
- d) State the principle of "Brasso" printing.
- e) Name different class of dyes used for printing of nylon.
- f) List out different print fixation methods of acrylic.
- g) Enlist different types of transfer printing.

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#### 2. Attempt any THREE of the following:

- a) Suggest the typical prin paste ingredients for polyester printing by atmospheric steaming.
- b) Explain the process of printing PET/cotton blend with disperse
  reactive system by single phase method.
- c) With typical print paste formulation describe printing of acrylic by direct style using disperse dye.
- d) Select relevant print paste ingredients to print nylon fabric by direct style using acid dye with Justification.

#### 3. Attempt any THREE of the following:

12

- a) Enlist different four techniques / methods of disperse dye print fixation on polyester and explain the print fixation mechanism during HTHP condition.
- b) With suitable reactions explain the mechanism of brasso style of printing on PET/cotton blended fabric.
- c) Enlist the characteristics of transfer printing paper and transfer printing ink.
- d) Classify inkjet printing and explain its concept.

### 4. Attempt any <u>THREE</u> of the following:

12

- a) State and explain the selection criteria of disperse dyes based on print fixation method.
- b) Describe the process of single dye application on PET/cotton blended fabric.
- c) Describe the process of printing nylon using metal complex dye by direct style.
- d) With a neat sketch, describe the Flexographic printing technique.
- e) Describe drop on demand inkjet printing with neat sketch.

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			Marks
5.		Attempt any TWO of the following:	12
	a)	Select relevant ingredients for printing of the given polyester fabric by discharge style with justification.	
	b)	With suitable print paste formulation describe printing of polyester / wool blended fabric using disperse / acid dyes.	
	c)	Suggest the relevant procedure to develop white and colour discharge effect on acrylic fabric.	

#### 6. Attempt any TWO of the following:

**12** 

- a) Give comparision between inkjet printing and conventional printing on any six points.
- b) With suitable print paste formulation describe discharge printing on nylon using disperse dye. Also state the precautions taken during discharge printing.
- c) Illustrate with schematic diagram, working of continuous transfer printing machine.

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