## 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) 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:**

20

- Enlist the thickeners that can be used for the printing of polyester fabric.
- Write down the recipe for printing of polyester using disperse dyes by direct (b) method.
- Write a note on the fixation of disperse dyes on polyester. (c)
- Write a note on the selection of dyes for printing of acrylic fibres. (d)
- Explain the preparation of nylon fabrics w.r.t. printing. (e)
- (f) Explain the mechanism of transfer printing.
- Explain the importance of printing of textiles using natural dyes. (g)

#### 2. **Attempt any FOUR:**

16

- What are the pre-requisites of polyester fabric to be suitable for printing purpose?
- (b) Write the procedure and recipe of printing p/c blended fabrics using disperse reactive system by direct method.
- (c) Write a note on the fixation methods of printed acrylic fabrics.
- (d) Give the recipe and procedure of printing nylon with acid dyes by adopting direct style of printing.
- (e) Enlist the advantages and limitations of transfer printing. (four each)
- (f) What is 'Ink-Jet Printing'? Explain.

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# 3. Attempt any FOUR: (a) Write a note on the single dye application on blended fabric. (b) Write down the essential properties of a thickener to be used for printing.

- (c) Explain the mechanism of print fixation of polyester using disperse dyes.
- (d) Write a note on the discharge style of printing of acrylic fibres.
- (e) Write down the recipe and procedure of printing of nylon using metal complex dyes by direct method.
- (f) Enlist the methods of transfer printing. Write the process sequence of the same.

## 4. Attempt any FOUR:

**16** 

- (a) Explain the various print fixation methods of polyester printed fabrics.
- (b) Write a note on the selection of colouring matter for printing of polyester.
- (c) Write the recipe and procedure for printing p/w blended fabric by direct style.
- (d) Elaborate on the machineries used for printing paper meant for transfer printing.
- (e) What are the different types of inkjet printing? Explain in brief.
- (f) Write a note on the machineries used for transfer printing.

### 5. Attempt any TWO:

**16** 

- (a) Write a note on the discharge style of printing of polyester. Enlist and explain the various discharging agents used. Also comment on the after treatments.
- (b) Write a note on the printing of p/c blends with pigments. Also explain the selection criteria of binders.
- (c) Explain the resist and discharge of printing of nylon. Comment on the fixation methods of both the styles of printing.

### 6. Attempt any TWO:

16

- (a) Write a note on the resist style of printing of polyester. Enlist and explain the various resisting agents used. Also comment on the after treatments of the same.
- (b) Write a note on the selection criteria of paper, ink and disperse dyes for transfer printing of textiles.
- (c) What are the advantages and limitations of printing of textiles with natural dyes? Enlist any four printing faults and their prevention and corrections.

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