

313342

24225

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 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.
  - (8) Use of Steam tables, logarithmic, Mollier's chart is permitted.

**Marks**

1. Attempt any FIVE of the following: 10
- a) Enlist any four thickness used for textile printing.
  - b) Recite different styles of printing.
  - c) Define the term “Mesh” and give its significance.
  - d) State the types of fabrics used for preparing screen in flat bed screen printing.
  - e) Identify the print fixation methods.
  - f) Recite on Khadi printing.
  - g) Discuss the pretreatment process sequence for 100% woolen fabric.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Differentiate between dyeing and printing (Any four points.)
  - b) Describe with neat sketch, the procedure to develop block printing effect on given 100% cotton poplin fabric.
  - c) Illustrate the step by step procedure for screen preparation of six colour printing using flat bed screen printing.
  - d) Describe with flowchart the procedure to develop print on silk using basic dyes by direct style of printing.
- 3. Attempt any THREE of the following:** **12**
- a) Elaborate the selection of relevant fixing method for direct dyes on 100% cotton printed by direct style of printing.
  - b) Differentiate between discharge style and direct style of printing. (Any four points)
  - c) Prepare the dye selection criteria for discharge printing and justify the same.
  - d) Elaborate the procedure of preparation of print paste with one suitable example.
- 4. Attempt any THREE of the following:** **12**
- a) Classify the thickness based on sources with one suitable example each.
  - b) Compare “Tie and Dye” printing and “Batik” printing. (Any four points)
  - c) Demonstrate any four advantages and four limitations of rotary screen printing machine.
  - d) Illustrate the conditions in a polymerising chamber employed for fixation of pigment prints with the help of a neat labelled diagram.
  - e) Describe the procedure to develop prints on wool using acid dyes by direct style of printing. Also comment on the steaming conditions for the fixation of prints.

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

- a) Elaborate on the ingredients used in the print paste formulation along with their functions.
- b) Differentiate between “Flat bed” and “Rotary” screen printing machines. (Any six points)
- c) Outline the formulation, printing procedure and print fixation for –
  - i) Reactive dyes on 100% cotton by direct style of printing.
  - ii) Vat dyes on 100% cotton by discharge style of printing.

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

- a) Compare the following in the pigment printing of 100% cotton poplin fabrics –
    - i) Print paste ingredients
    - ii) Function of ingredients
    - iii) Mechanism
    - iv) Process sequence
    - v) Print fixation conditions
    - vi) Types of binders used.
  - b) Develop the procedure to print wool fabric by direct style using metal complex dyes. Also elaborate the print paste formulation and print fixation conditions.
  - c) Set-up a six colour rotary screen printing machine sketch for the following :–
    - i) Technical features
    - ii) Production capacity
    - iii) Types and sizes of squeezes.
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