# 23124 3 Hours / 70 Marks

Seat No.

#### 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.
- (5) 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 Mercerization.
- (b) Name the bleaching agents used for bleaching polyester/wool blended fabric.
- (c) Write the molecular structure of Direct dye.
- (d) Write any four characteristics of Acid dye.
- (e) Name the discharging agent used in discharge printing (Chemical name and Common name both).
- (f) State the objective of Printing.
- (g) Classify the softness used in finishing.

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

12

- (a) Classify singeing machines and describe gas singeing machine.
- (b) Compare batch wise and continuous method of bleaching (any four points).
- (c) Describe dyeing of cotton fabric with hot brand reactive dyes.
- (d) Describe the mechanism of printing by pigments.



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## 3. Attempt any THREE of the following: 12 Compare acid desizing with enzyme desizing (any four points). (a) (b) Describe the Wet process sequence for P/C blended fabric. (c) State the need of after treatments on direct dyed goods and explain any one method. (d) Describe dyeing of polyester fabric in HTHP dyeing machine. 4. Attempt any THREE of the following: 12 (a) Describe application of Vat dyes on cotton materials. Describe with sketches the procedure of dyeing wool with acid dyes. (b) Describe dyeing mechanism while dyeing of nylon with metal complex dyes. (c) Discuss the different Squeezee system used in rotary screen printing machine. (d) Describe with neat sketch any four types of Calendaring finish. (e) 5. Attempt any TWO of the following: 12 Justify, the need of carrier for dyeing polyester with disperse dye. (a) "Discharge style of printing for white discharge effect requires, ground of (b) fabric, dyed with dye which will be easily destroyed during printing." Justify, the statement. Describe the mechanism of creasing and resin finishing. (c) 12 6. **Attempt any TWO of the following:** Which type of dyes are suitable for resist style printing? How is white resist (a) style of printing done on cotton fabric? Describe the requirements and mechanisms of antimicrobial finish for cotton (b) fabric. Justify the importance of LOI and its relation with thermal behaviour of (c) textiles.

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