17458

15162 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) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

20

1. Attempt any FIVE :

- (a) Give the process sequence flow chart for textile wet processing. State the importance of grey inspection.
- (b) What is the objective of scouring ? Give the recipe for scouring of cotton fabric.
- (c) Give the comparison between dyes and pigments.
- (d) Explain the terms :
 - (i) Percentage shade
 - (ii) Percentage expression
- (e) Differentiate between dyeing and printing of textiles.
- (f) Explain the concept of InkJet printing technique.
- (g) Describe the evaluation method for rubbing fastness properties of dyed fabrics.

2. Attempt any TWO :

- (a) What is the objective of singeing process ? Describe the Gas singeing machine with its construction and working. Write its advantages and limitations.
- (b) Describe in detail the dyeing of polyester fabric with disperse dyes by HTHP method.
- (c) State two importance of evaluating fastness properties of dyed textiles. Explain evaluation methods of washing fastness and perspiration fastness of dyed fabric.

16

3. Attempt any FOUR :

- (a) Describe the enzymatic desizing process for gray cotton fabric.
- (b) Explain the importance of printing paste ingredients with their functions.
- (c) Describe Tie and dye method for cotton fabric.
- (d) What are the objectives of Thickners in printing paste ? Give the properties of sodium alginate.
- (e) Give the difference between flat-bed printing and rotary printing.
- (f) Describe any one method for evaluation of light fastness for coloured fabric.

4. Attempt any TWO :

- (a) What is the objective of Bleaching ? Describe in detail the bleaching of cotton fabric with Hydrogen peroxide with it's advantages and limitations.
- (b) With neat labelled diagram describe the construction and working of Jigger dyeing machine. Write it's advantages and limitations.
- (c) Describe in detail the direct style and discharge style of printing for cotton fabric with reactive dyes.

5. Attempt any FOUR :

- (a) Explain the concept of cotton dyeing with natural dyes.
- (b) Describe the resist style of printing for polyester fabric with disperse dyes.
- (c) Give the advantages and limitations of roller printing machine.
- (d) Explain the concepts of speciality prints link. Pearl printing and foam printing.
- (e) State the importance of sublimation fastness property of disperse dyes. How it can be made use in textile printing ?
- (f) Explain the application methods of vat dyes for cotton fabric.

6. Attempt any TWO :

- (a) What is mercerisation process ? Describe the mercerisation process for cotton fabric by pad-chainless machine. Write its advantages and limitations.
- (b) Explain in detail the dyeing of cotton fabric with reactive dyes by various methods. Write their advantages and limitations.
- (c) Describe the construction and working of rotary printing machine for printing of cotton fabric with reactive dyes alongwith the after treatment for the same.

17458

16

16

16