22232 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) 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 importance of singeing process.
- (b) State the objects of scouring of cotton.
- (c) Define the terms:
 - (i) Percentage shade and
 - (ii) Percentage expression
- (d) State any four properties of reactive dyes.
- (e) List out different methods of dyeing of polyester fibre.
- (f) State different methods and styles of printing.
- (g) Enlist any four novel printing methods.

2. Attempt any THREE of the following:

12

(a) With a neat sketch, describe construction and working principle of Gas singeing machine.

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- (b) Suggest relevant dyeing procedure for wool using acid dye with proper justification.
- (c) Describe one bath dyeing of polyester/cotton blended fabric with disperse/reactive combination.
- (d) Differentiate between dyeing and printing with following points :
 - (i) definition
 - (ii) size
 - (iii) chemical action
 - (iv) method of application

3. Attempt any THREE of the following:

12

- (a) Suggest the criteria for selection or rejection of fabric using 4 point & 10 point inspection system with justification.
- (b) Describe dyeing procedure for 100% polyester fabric by using thermosol method.
- (c) List out important print paste ingredients and write their specific functions.
- (d) Describe "Khadi Printing" with process parameters.

4. Attempt any THREE of the following:

12

- (a) Describe any one method for evaluation of the efficiency of desizing.
- (b) Suggest relevant method of scouring cotton fabric in kier with process parameters.
- (c) With a typical print paste recipe, explain a method of printing cotton using reactive dye by direct style.
- (d) Suggest printing method for Fluorescent print effect with paste formulation and process parameters.
- (e) Describe the method to produce "magic printing" on given fabric.

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5. Attempt any TWO of the following:

- (a) Suggest a batch method for bleaching of cotton using H_2O_2 with process parameters.
- (b) Suggest process parameters for dyeing of cotton fabric with hot brand reactive dye.
- (c) With process parameters, describe dyeing procedure to get "Cross dyeing" on polyester/cotton blended fabric.

6. Attempt any TWO of the following:

12

12

- (a) With neat diagram, explain working of padding mangle and jigger machine.
- (b) Suggest process parameters and print paste recipe for printing of polyester by direct style.
- (c) Suggest process parameters and principle to get "Brasso effect" by suitable print paste recipe.

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