23242 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) 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:

10

- (a) Enlist any four objectives of grey inspection department.
- (b) Recite the classification of colouring matter.
- (c) State the reason for naming of direct dyes.
- (d) List the classification of acid dyes based on acid used in the dye bath.
- (e) Memorize any four properties of metal complex dyes.
- (f) Compare between batch process and continuous process (any two points).
- (g) Enlist different methods of printing.

2. Attempt any THREE:

12

- (a) Illustrate with a neat labelled diagram, scouring of cotton fabric by using a vertical pressure kier.
- (b) Explain with neat labelled flow chart, the procedure for processing of P/C blended fabric.



22367 [2 of 4]

- (c) Illustrate with a recipe, the procedure of printing P/V blended fabric using pigments.
- (d) Describe with a neat labelled diagram, sanforizing of 100% cotton fabric.

3. Attempt any THREE:

12

- (a) Illustrate with proper recipe & reaction, the procedure of dyeing silk using basic dyes.
- (b) Illustrate with proper formulation, the procedure of printing cotton fabric using reactive dyes by direct style.
- (c) Differentiate between discharge style and resist style of printing (any four points).
- (d) Describe with proper formulation, the procedure for crease resistant finishing of 100% cotton poplin fabric.

4. Attempt any THREE:

12

- (a) Outline the dying procedure of 100% polyester fabric by HTHP method with the help of a dying ramp (Time temperature profile).
- (b) Describe with a neat time temperature profile, the procedure of dyeing wool fabric using acid dyes.
- (c) Describe the technical features of a washer used in printing department.
- (d) Describe the mode of action of a flame retardant finish when applied to 100% cotton fabric.
- (e) Describe the features of a modern Stenter.

22367 [3 of 4]

5. Attempt any TWO:

12

- (a) Describe with neat sketch, the gas singeing process of 100% cotton fabric. Also enlist the precautions to be taken while starting and stopping gas singeing machine.
- (b) Compare the batch wise and continuous bleaching of 100% cotton using CBR and soft flow machine.
- (c) Compare the different types of vatting systems used in the application of vat dyes on 100% cotton fabric.

6. Attempt any TWO:

12

- (a) Compare the dyeing of 100% nylon fabric using disperse dyes, acid dyes and reactive dyes & write the special feature of each dyeing method.
- (b) Compare the objective of using different types of squeezes in the printing of cotton on rotary screen printing machine.
- (c) Compare the various finishing effects (on 100% cotton) that can be achieved on a calendering machine with the help of a neat diagram.

[4 of 4]