

17466

11920

3 Hours / 100 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Figures to the right indicate full marks.
(4) Use of Non-programmable Electronic Pocket Calculator is permissible.
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any TEN of the following:

20

- Write the objectives of textile finishing?
- Outline give the procedure for dyeing of cotton with azoic dyes.
- Define :
 - Fiber
 - Yarn
- Write the classification of direct dyes.
- Write the process of printing of cotton fabric with vat dyes.
- Define the term “Printing”.
- Give two examples of mechanical and chemical finishes.
- Name two azoic dyes. Indicate the chromosphere.
- Name the chemicals used for the dissolution of sulphur dyes.
- Give any two advantages of yarn dyeing process.
- Give the classification of textile finishes.

P.T.O.

- l) Name different methods of printing of textiles.
- m) Explain significance of heat setting of Polyester.
- n) Distinguish between batch process and continuous process.
- o) Define a dye. Name dyes used for dyeing of cellulosic fibres.

2. Attempt any FOUR of the following: 16

- a) Distinguish between dyes and pigments.
- b) Describe the different types of resins used for the finishing of cotton fabrics.
- c) With a well labelled diagram, explain the working and construction of Jet dyeing machine.
- d) With proper recipe, explain the procedure of printing of cotton using reactive dyes.
- e) Explain with examples, the water repelent finishes on textile materials.
- f) Define Vat dyes. Classify vat dyes, giving examples.

3. Attempt any FOUR of the following: 16

- a) Write the constructional features and describe working of Stenter machine.
- b) Explain the styles of printing with their methods of applications on textile fibres.
- c) Write the constructional features and working of package dyeing machine.
- d) Explain the process of dyeing of polyester and cotton blended fabrics.
- e) Explain the flame retardant finishes applied on textile fabrics.
- f) Explain any two after treatments which are carried out on direct dyed fabrics to improve the fastness properties.

- 4. Attempt any FOUR of the following:** **16**
- a) Explain working principle of Jigger dyeing machine.
 - b) Describe the procedure of carrying out discharge style of printing of vat dyed fabrics.
 - c) (i) Define mercerization. 1
(ii) Explain the changes that take place on cotton fabrics during mercerization. 3
 - d) Describe the process of dyeing of acrylic with cationic dyes.
 - e) With a neat and well labelled diagram, explain different types of padding mangles.
 - f) Explain the dyeing of Nylon with reactive dyes.
- 5. Attempt any FOUR of the following:** **16**
- a) Name the various chemicals used in printing. State the functions of each of them.
 - b) What are optical brightening agents? Explain the chemistry involved in optical brightening agents with two examples.
 - c) (i) Write working of a winch dyeing machine.
(ii) State its advantages.
 - d) Explain with example, flame retardant fabrics.
 - e) Describe the printing of cotton fabric using pigments by using direct style of printing.
 - f) Draw a well labelled diagram of flat bed screen printing machine and state its working principle.

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[4]

Marks

- 6. Attempt any TWO of the following:** **16**
- a) Describe the various methods of dyeing of polyester with disperse dyes.
 - b) (i) Explain the construction and working of Sanforising machine. 6
(ii) State application in textile finishing. 2
 - c) (i) Describe the construction and working of “Rotary screen” printing machine. 5
(ii) State advantages and limitations. 3
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