

22360

12425

3 Hours / 70 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
- (2) Illustrate your answer with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data, if necessary.
- (5) Use of Non-programmable Electronic Pocket Calculator is permissible.
- (6) 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 sizing cotton yarn.
- b) State the importance of mechanical pretreatments.
- c) State the objective of singeing process.
- d) Name any two enzymes permanently used for desizing cellulose fibre.
- e) Define scouring and mention the main scouring agent for cotton.
- f) List the oxidative bleaching agents.
- g) List the different types of fabric mercerization machine.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Describe the ingredients used in sizing of cotton yarn.
 - b) Draw flow chart of pretreatment sequence of polyester/cotton blend.
 - c) Describe batchwise desizing process.
 - d) Identify the factors that affects desizing process.
- 3. Attempt any THREE of the following:** **12**
- a) Formulate sizing recipe for polyester/cotton blended fabric.
 - b) Define the terms – Crabbing and milling of wool.
 - c) Describe degumming of silk with proper recipe.
 - d) Illustrate the precautions to be taken while bleaching of silk fabric.
- 4. Attempt any THREE of the following:** **12**
- a) Describe continuous bleaching process of cotton fabric.
 - b) Compare sodium chlorite bleaching with sodium hypochlorite bleaching.
 - c) Describe the changes takes place in cotton fabric due to mercerization.
 - d) Describe Barium activity test to evaluate the efficiency of mercerization.
 - e) Select the chemical for mercerization in relation with temperature, time and concentration of the process.
- 5. Attempt any TWO of the following:** **12**
- a) What are the criteria in 10 point system of grey fabric inspection? and State its advantages and disadvantages.
 - b) Suggest chemicals and procedure for enzyme desizing with advantages and disadvantages.
 - c) “Bio-souring has high potential in todays world”, Justify the statement.

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[3]

Marks

6. Attempt any TWO of the following:

12

- a) Describe any two tests to evaluate the efficiency of scouring.
 - b) Justify the role of stabilizer and Activator in peroxide bleaching of cotton.
 - c) Describe with neat sketch chainless fabric mercerisation machine.
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