

22360

21819

3 Hours / 70 Marks

Seat No.

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- 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 of the following:** **10**
- a) Enlist four objectives of sizing.
- b) Justify the importance of two mechanical pretreatments.
- c) Define the term Desizing.
- d) Enlist the hydrophobic matter present in cotton
- e) Write any four weaving faults found in grey fabric during fabric inspection.
- f) Write the qualitative method to identify the size present on grey fabric.
- g) Enlist the solvent used for scouring of textiles.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Write a note on the different types of adhesives used for sizing of textile yarns.
 - b) Compare four point and ten point system of fabric inspection also mention the criteria for rejections.
 - c) Describe the procedure to evaluate the scouring efficiency of given fabric.
 - d) Explain the mechanism of sodium hypochlorite bleaching . Write the factor affecting efficiency of process.
- 3. Attempt any THREE of the following:** **12**
- a) Write and justify the size paste formulation for 100% cotton and PLC blended poplin fabric.
 - b) With a neat labelled diagram explain the crabbing of wool.
 - c) Discuss the changes brought by mercerisation in the fibre structure.
 - d) Compare between sodium hypochlorite bleaching and hydrogen peroxide bleaching (four points).
 - e) Explain the caustisation process give its significances.
- 4. Attempt any THREE of the following:** **12**
- a) Write the procedure for Bio-Scouring of cotton fabric. State advantages of it.
 - b) Write the precautions to be taken during the scouring of knitted cotton fabrics. Also write the process of scouring knitted fabrics
 - c) Explain the factors affecting efficiency of mercerisation of cotton fabric.
 - d) Describe the process for bleaching polyester fabric using sodium chlorite. Also state disadvantages of the process.
 - e) With a neat labelled diagrams , explain the construction and working of yarn mercerising machine.

5. Attempt any TWO of the following:**12**

- a) With a neat labelled diagram explain the procedure of singeing 100% cotton fabric on a singeing machines. Enlist the precautions to be taken during singeing.
- b) Write the procedure of enzymatic desizing of cotton fabrics. Also list the advantages of enzyme desizing.
- c) Explain two methods for Degumming of silk fabric.

6. Attempt any TWO of the following:**12**

- a) With a neat labelled diagram explain the bleaching of cotton using hydrogen provided by
 - (i) Batch wise method
 - (ii) Continuous method
 - b) With a neat sketch explain the features of a padless-chainless mercerising machine.
 - c) With a neat labelled diagram explain the construction and working of a vertical kier used for scouring of 100% cotton poplin.
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