

22360

11920

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 of the following: **10****
- a) Write any four objectives of sizing.
 - b) Justify the importance of shearing and cropping.
 - c) Enlist the different types of desizing chemicals available for desizing.
 - d) Draw the flow chart of the various processes involved in the pretreatment of 100% cotton fabric.
 - e) Define Rot steeping desizing. Give two limitations of it.
 - f) Why is sodium hypochlorite bleaching not preferred now a days.
 - g) What is the purpose of Caustiazation?

P.T.O.

- 2. Attempt any THREE of the following: 12**
- a) Enlist the ingredients of a sizing recipe and write the function of each ingredients.
 - b) Explain the four point fabric inspection system? Write the criteria for rejection.
 - c) Describe the souring process of 100% PET poplin fabric with recipe.
 - d) Write the bleaching recipe for PET using sodium chlorite bleaching process. Also write the functions of each ingredient.
- 3. Attempt any THREE of the following: 12**
- a) Write a note on the types of starches used in sizing of textile yarns.
 - b) Describe a method to determine the desizing efficiency of given 100% cotton poplin fabric.
 - c) With reactions, explain the mechanism of scouring 100% cotton cambric fabric.
 - d) Enlist and explain the factors affecting the mercerisation process.
- 4. Attempt any THREE of the following: 12**
- a) With a neat labelled diagram explain the milling process of 100% wool.
 - b) Enlist and explain the precautions to be taken during the bleaching of 100% woollen fabric.
 - c) Enlist the changes occurring in cotton fibres due to mercerisation process.
 - d) Write a formulation for bleaching of 100% cotton fabric using H_2O_2 . Give the function of each ingredient.
 - e) Describe the procedure of evaluating the mercerising efficiency of 100% cotton fabric.

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

- a) With a neat labelled diagram, write the construction and working principle of two way gas singeing machine.
- b) Explain the different method of scouring of textiles.
- c) Write the mechanism of H_2O_2 bleaching of 100% cotton fabrics. Enlist and explain the factors affecting the bleaching.

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

- a) What are the objectives of degumming silk fabrics? Enlist and explain the different methods.
 - b) Enlist and explain the factors affecting the desizing process of 100% cotton fabric.
 - c) Write a note on :
 - (i) Hot mercerisation
 - (ii) Liquid ammonia mercerisation
-