22460

12425

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.

Marks

1. Attempt any FIVE of the following : **10**

(a) State the object of finishing.

(b) Name any one cationic softener with its chemical structure.

(c) State the object of resin finishing.

(d) State the object of OBA application.

(e) Define the term "LOI".

(f) State the object of antimicrobial finishing.

(g) Identify the LOI value for cotton and wool fibres.

2. Attempt any THREE of the following : **12**

(a) Describe the construction and working of calender machine with neat sketch.

(b) Differentiate between cationic softener and anionic softener in four points.

(c) Describe application process of DMDHEU resin on cotton. Also state properties.

(d) Describe burning cycle and thermal behaviour of cotton fibre.

3. Attempt any THREE of the following : **12**

(a) Differentiate between exhaust method and padding method of application in processing.

(b) Explain the mechanism of cationic softener. State its properties.

(c) Explain the method to find crease recovery angle of cotton fabric.

(d) Explain the factors affecting on flame retardancy properties.

4. Attempt any THREE of the following : **12**

(a) Explain the mechanism of crease formation in cellulosics.

(b) Suggest the suitable resin finishing method for 100% suiting fabric with its parameters.

(c) Differentiate between bleaching agent and OBA.

(d) Explain coating theory of flame retardancy for 100% cotton fabric.

(e) Explain essential requirements of good antimicrobial finish.

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

(a) Describe the construction and working of stenter machine with neat sketch.

(b) Select suitable softener for cotton fabric to get permanent finish. State its properties. Describe the application process in detail.

(c) Select suitable crosslinking agents to get eco-friendly resin finishing. State its properties with their chemical structures.

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

(a) Suggest any three methods for stripping of OBA from Textiles.

(b) Describe any one method for evaluation of flame retardency of the fabric.

(c) Explain mechanism of antimicrobial finishing for Textiles with its importance.
