

17469

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) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Assume suitable data, if necessary.

Marks

1. Attempt any FIVE of the following :

20

- (a) Define and explain the term "Percentage expression".
- (b) State the objectives of calendaring.
- (c) What are softeners ? Give classification of softener.
- (d) State the object of resin finishing and classify resins.
- (e) What are the limitations of resin finishing ?
- (f) Define L.O.I. Explain its importance. Give one example.
- (g) Give the classification of Flame retardants.

2. Attempt any TWO of the following :

16

- (a) With a neat labelled diagram explain the working principle of 7 basic calendaring machine. Enlist the various effects achieved.
- (b) Describe mode of action and application of cationic and Reactive softeners on cotton fabric with reaction.
- (c) Describe the mechanism of creasing and concept of anticreasing on cellulosic material.

3. Attempt any TWO of the following : 16

- (a) With a suitable diagram, explain the working & operation to Two-bowl and Three-bowl padding mangle.
- (b) With typical recipe explain the method of applying durable press finish for denim garments. Write two advantages & limitations each.
- (c) What are OBA's ? Explain chemistry, mechanism and application of OBAS on cotton.

4. Attempt any TWO of the following : 16

- (a) Describe the concept of flame proofing and flame retardancy. Also state the factors affecting flame retardancy of a fabric.
- (b) State the object, requirements, types of antimicrobial finishing. Also explain mechanism of antimicrobial finishing.
- (c) What do you understand by the terms "Water proof" and "Water repellent" finishing ? Give a method of making water repellent textile for umbrella fabric manufacturing.

5. Attempt any TWO of the following : 16

- (a) With suitable diagram explain the working principle of (i) Sueding and (ii) Sanforising machine.
- (b) Classify stiffeners with one example each. Explain their applications in textiles.
- (c) Describe the methods of evaluating crease recovery angle and DP rating of crease resistant finished fabric.

6. Attempt any TWO of the following :**16**

- (a) State the essential requirements of a good flame retardant. How will you make a flame retardant Polyester and Nylon.
 - (b)
 - (i) Write the properties of Anionic and Non-ionic softners (Any four properties)
 - (ii) Write a note on stripping of OBA.
 - (c) Explain :
 - (i) Bio polishing of cotton
 - (ii) Nano-finishes
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