

22577

11920

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) Figures to the right indicate full marks.
(4) Assume suitable data, if necessary.
(5) 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) Define the term - Heat Setting.
 - b) State the causes of Pill formation.
 - c) Enlist any four types of soils on textiles.
 - d) Define - foam and blow ratio.
 - e) State any four applications of stenter machine.
 - f) Define the term :
 - (i) Micro,
 - (ii) Nano
 - g) Enlist the special finishing methods for textiles.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) With neat sketch describe the stages of heat setting.
 - b) Describe the method of evaluation of pilling properties by pilling tester.
 - c) Define % expression and use the method to calculate it.
 - d) Select the suitable chemical formulation for soft finish on polyester / cotton fabric with proper justification.
- 3. Attempt any THREE of the following:** **12**
- a) Explain the thermal behaviour and changes in properties due to heat setting in synthetic fibres.
 - b) Explain the factors affecting pilling properties of the fabrics.
 - c) Describe the evaluation method for soil release finish from textiles.
 - d) Explain the concept of foam technology and write its two advantages and two disadvantages.
- 4. Attempt any THREE of the following:** **12**
- a) Justify the statement - Heat setting temperature for polyester is more than 180°C.
 - b) Describe the method to determine the % shrinkage in the synthetic fabrics.
 - c) Explain the factors affecting the soiling of textiles.
 - d) Select a suitable chemical formulation for stiff finish on polyester / cotton blend fabric.
 - e) Explain the terms water proof and water repellent finishes.

5. Attempt any TWO of the following: 12

- a) Select a heat setting stages and conditions for polyester and P/C blend fabrics.
- b) Choose the chemical formulations for soil release finish from the fabrics.
- c) Suggest any two foam application methods with suitable sketch. Write precaution and procedure of them.

6. Attempt any TWO of the following: 12

- a) Select and explain the methods used for Anti-pilling of the fabrics.
 - b) Explain the mechanism and procedure for weight reduction of polyester.
 - c) Describe the milling methods used for wool with advantages and limitations.
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