

22575

23124

3 Hours / 70 Marks

Seat No.

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- Instructions :**
- (1) All Questions are *compulsory*.
  - (2) Figures to the right indicate full marks.
  - (3) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

**1. Attempt any FIVE :**

**10**

- (a) Define Heat Setting.
- (b) State the advantages and limitations of CDR machine.
- (c) State the chemical properties of polyester fibre.
- (d) State the function of retarders in acrylic dyeing.
- (e) State colour effects produced by blending of fabrics.
- (f) State the advantages of cartinean methods for blend fabric dyeing.
- (g) Compare batch dyeing method to cartinean dyeing method in two points.

**2. Attempt any THREE :**

**12**

- (a) Describe the effect of scouring and dyeing behaviour of polyester.
- (b) Describe the thermosol dyeing method for polyester fabric.
- (c) Explain the defects in dyeing of acrylic and write their remedies.
- (d) Suggest the remedies for faults in blend dyeing.



- 3. Attempt any THREE :** **12**
- (a) Describe the scouring and bleaching formulations for Nylon fabric.
  - (b) Describe the classification of Acid dyes with their properties.
  - (c) Justify the need of levelling agents in Nylon dyeing.
  - (d) Explain the procedure for dyeing of polyester/cotton blend with disperse/reactive system.
- 4. Attempt any THREE :** **12**
- (a) With neat sketch, explain the working principle of soft flow dyeing machine.
  - (b) Describe the mass colouration method for polyester dyeing.
  - (c) Describe the dyeing method for acrylic with disperse dyes.
  - (d) Suggest the procedure for dyeing polyester/wool fabric with suitable dye formulation.
  - (e) Explain the procedure of one bath dyeing of polyester/cotton blend.
- 5. Attempt any TWO :** **12**
- (a) With neat sketch, describe the working of Jet dyeing machine.
  - (b) Suggest the procedure for dyeing of polyester with carrier method. Write its advantages and limitations.
  - (c) Explain the use of fibre saturation factor and dye saturation value in dyeing of Acryline fabric with justification.
- 6. Attempt any TWO :** **12**
- (a) Suggest stepwise procedure of dyeing polyester by High Temperature High Pressure method. Write its advantages and limitations also.
  - (b) Identify any two faults and give their remedies in Nylon dyeing with acid dyes and basic dyes.
  - (c) Compare the techno commercial aspects of dyeing blends with respect to single component substrate.
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