

# 22674

**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 answer with neat sketches wherever necessary.  
(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) Enlist any four dye-stuff performance tests.
  - b) State the importance of testing of dyes.
  - c) Enlist any four dyeing auxiliaries.
  - d) Define the term “Barium activity number”.
  - e) List the quality control test used for bleaching and Mercerization.
  - f) List out colour fastness properties (Any four).
  - g) Define “Crease recovery angle”.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Describe a method of critical temperature test for testing performance of a dye.
  - b) Explain moisture content and viscosity tests for thickeners used in printing.
  - c) Describe the procedure to find “Copper number” with norms.
  - d) Elaborate the method of determining “Barium activity number” with norms.
- 3. Attempt any THREE of the following:** **12**
- a) Explain the principle involved in evaluation of colour fastness.
  - b) Describe the procedure to determine crease recovery angle of the finished fabric.
  - c) Describe relevant method for evaluation of desizing efficiency of a given sample.
  - d) Describe a relevant method of stripping acid dye and vat dye from dyed sample.
- 4. Attempt any THREE of the following:** **12**
- a) Explain the method of evaluation of levelling test of a dye.
  - b) Describe a relevant test method for evaluation of efficiency of binder.
  - c) Describe the procedure for quantitative estimation of hydrogen peroxide.
  - d) Elaborate the procedure to determine axial ratio with their norms.
  - e) Explain a method for evaluation of colour fastness to washing with norms.

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

- a) Elaborate the process to determine migration of dye.
- b) Describe a method to evaluate efficiency of flame retardant finishing.
- c) Suggest a relevant method to find efficiency of bleaching and give its norms.

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

- a) Enlist the norms and elaborate the test method for testing light fastness of a dyed sample.
  - b) Describe the relevant test method for quality control in soil release finishing and state its norms.
  - c) Suggest method to evaluate performance test of synthetic stiffeners.
-