



# 17567

16172

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.*

**Marks**

1. Attempt **any ten** :

**20**

- a) Define “Quality” and give its significance.
- b) Give the process control parameters used in the Desizing department.
- c) What are the production norms and check points used in the package dyeing machines.
- d) List the various problems of the dyeing of textiles.
- e) Explain the importance of process control in industries.
- f) What are the production norms of the printing process ?
- g) Describe the term “Carboxyl group content”. Give its testing method norms.
- h) What are the norms for the “Rubbing fastness” test of textiles ?
- i) What are the process controls in various finishing machines ?
- j) Describe the terms process control.
- k) What are the norms for testing the “perspiration fastness” of textiles ?
- l) What is the significance of quality control in finishing ?
- m) State the production norms of a stenter and sanforising machines.
- n) What are the norms for the “Sublimation fastness” test of textiles ?

2. Attempt **any four** :

**16**

- a) Describe the objectives of process and quality control in industries.
- b) Explain the various process control parameters in the “singeing” department.
- c) Describe the use of different process control parameters for “Jiggers” and “padding mangles”.
- d) Explain the structure and functions of the quality assurance department.
- e) Describe the various problems and their remedies occurring during pretreatments of textiles.
- f) Explain the working of jet dyeing machine and also give its process control parameters.

**P.T.O.**



- 3. Attempt any four:** **16**
- a) What do you understand by “Quality Assurance”? Explain its importance.
  - b) Explain the various production norms and check points used in the scouring and bleaching process.
  - c) Describe the various measures to be taken to achieve “Right First Time” dyeing.
  - d) Explain the various process control parameters used in the Flat bed screen printing machine.
  - e) Explain the different process controls in stenters and calendering machines of the finishing department.
  - f) Describe the different process control parameters deployed in a Continuous Bleaching Range (CBR).
- 4. Attempt any four:** **16**
- a) Explain the various problems and the remedies in printing of textiles.
  - b) Explain the different process control parameters of sanforising machines and drying range.
  - c) Describe the term “Barium activity no” and give its norms for quality control.
  - d) Explain the norms and the testing method of “measuring” “Bending length” for quality in finishing.
  - e) Describe the rotary screen printing machine along with its process control parameters.
  - f) Describe the method for testing “Crease Recovery angle”. Also give the various norms required for the above test.
- 5. Attempt any four:** **16**
- a) Explain the problems encountered in the finishing of textiles, also give the remedies to rectify or avoid the problems.
  - b) Explain the “Washing fastness” test for textiles. What are the norms used for this test?
  - c) Explain the norms and the method of testing “Axial Ratio” and “Weight loss”.
  - d) Describe the method for determination of “Iodine absorption” and state its norms.
  - e) Describe the method for determination of “Light fastness” along with its norms for quality testing of textiles.
  - f) Explain the testing methods for determination of whiteness index also state its significance.
- 6. Attempt any four of the following:** **16**
- a) Describe the method for checking efficiency of singeing process.
  - b) What is lab to bulk recipe formulation? How it is carried out?
  - c) Enlist the various process parameters in printing department.
  - d) What is sanforising? State its process control parameter.
  - e) Describe the method for determination of ‘cupra ammonium fluidity’.
  - f) What is sublimation? Explain the method for determination of sublimation fastness.
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