# 17567

# 15116

# 3 Hours / 100 Marks Seat No.

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.
- (6) Use of Non-programmable Electronic Pocket Calculator is **permissible**.
- (7) Mobile Phone, Pager and any other Electronic Communication devices are **not** permissible in Examination Hall.

Marks

## 1. Attempt any five:

20

- a) Differentiate between process control and quality control.
- b) What are the major areas of process control in pretreatments of textiles?
- c) Enlist and explain the process control parameters on Jigger dyeing machine.
- d) Write a note on the test for suitability of thickness in print paste formulation.
- e) Explain the Iodine absorption test for the evaluation of degree of resin cross linking.
- f) Enlist and explain the quality control measures in desized fabrics.
- g) Write down the procedure of determining the dimensional stability of fabrics.

# 2. Attempt any four:

16

- a) Enlist and explain in brief the process control parameters in scouring department.
- b) Explain the process control parameters in discharge and resist style of printing.
- c) What are the various process control parameters on calendering machine? Explain.
- d) Explain barium activity number test.
- e) Write down the procedure of determining colour fastness to perspiration.
- f) What is crease recovery angle? Give its significance? Write the procedure of determining CRA.

# 3. Attempt any four:

16

- a) Justify the importance of quality assurance department in an industry.
- b) Enlist and explain the process control parameters in singeing department.

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- c) What are the process control parameters in package dying machines.
- d) What are the production norms of flat bed screen printing machine?
- e) What are stenters? Mention and explain the process control parameters for stenter.
- f) Explain the axial ratio and deconvolution count method of checking the efficiency of mercurisation.

# **4.** Attempt **any four**:

16

- a) Why is process control necessary? Justify its importance in the two examples.
- b) Compare any four process control parameters of continuous dyeing range with soft flow dying machine.
- c) Enlist any four problems and its remedies in brief on a rotary screen printing machine.
- d) Explain the procedure for determining the copper number? Give its significance.
- e) What are Grey scales? Explain its significance in determining the colour fastness to various agencies.
- f) What is bending length? Give its significance and write its procedure with the help of a neat diagram.

## 5. Attempt any two:

16

- a) Draw the structure of a quality assurance department. Enlist its functions and describe its method of working.
- b) Enlist any two problems each in designing, scouring, bleaching and mercurising departments. Write the remedies of the same.
- c) Write a detailed note on the determination of colour fastness to light by British standard. Explain the different conditions of determining the colour fastness to washing.

# **6.** Attempt any two:

16

- a) Write a detailed note on RFT dying concept. Explain its importance in a organisation. What are the various measures for achieving RFT?
- b) Enlist and explain the various process control parameters on stenters, sanforiser and dying range.
- c) Write a detailed note on the quality control measures for:
  - i) Water proof and water repellent finishes
  - ii) Flame proof finishes
  - iii) Tear and tensile strength of textiles.