

22367

21819

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) 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 of the following: **10****
- a) State the objectives of grey inspection.
 - b) Draw the wet process flow chart for pre treatment of P/C blended fabric.
 - c) Write the classification of direct dyes.
 - d) Give the sub classification of acid dyes.
 - e) Enlist the machines used for bleaching of textiles.
 - f) Define the term 'percentage shade'.
 - g) List the names of chemicals used in white dyeing with basic dyes.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Explain the procedure of bleaching using hydrogen peroxide.
 - b) Write the dyeing procedure of wool using acid dyes. Also mention two advantages of acid dyeing of wool.
 - c) Explain the mechanism of discharge printing.
 - d) With chart explain the classification of textile finishes.
- 3. Attempt any THREE of the following:** **12**
- a) Explain step wise procedure for vat dyeing of cotton.
 - b) Write process flow chart for dyeing of P/C blended fabrics.
 - c) Write the formulation and procedure of printing cotton using direct dyes by Direct Style of printing.
 - d) With a neat labeled diagram explain the construction and working of a calendaring machine.
 - e) Write the mechanism and procedure of pigment printing of 100% cotton poplin fabric.
- 4. Attempt any THREE of the following:** **12**
- a) Write the dyeing procedure of basic dyes on acrylic fibres by using retardas.
 - b) List the names of machines used in the fixation of prints on textiles. Also write the objectives of fixation.
 - c) Explain the concept of:
 - (i) Wash-n-wear finish.
 - (ii) Durable press finish.
 - d) Write the list of ingredient used in printing of textiles and state their function.
 - e) Describe Limiting Oxygen Index. Give its significance and importance in flame retardant finishing.

- 5. Attempt any TWO of the following:** **12**
- a) Explain the factors affecting on efficiency of mercerization. Also write the changes brought about in fabric after mercerization.
 - b) Compare batch wise and continuous methods of bleaching based on:
 - (i) Production speed
 - (ii) Efficiency
 - c) Explain the dyeing mechanism of polyester using disperse dyes. Enlist the different methods of dyeing polyester and mention their dyeing temperature.
- 6. Attempt any TWO of the following:** **12**
- a) Reactive dyes chemically bond with fibre. Justify the statement with example.
 - b) With a neat labeled sketch, write the technical features of a rotary screen printing machine.
 - c) What are the desirable properties of a anti microbial finishes. Give the mechanism of action of a anti microbial finishing agent on cotton.
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