

# 17458

21415

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.

(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) Write a note on the impurities present in grey cotton fabric.

(b) With one suitable example, explain the term 'Percentage Shade' and 'Percentage Exhaustion'.

(c) Differentiate between dyeing and printing (any four points).

(d) Enlist any four advantages and limitations of flat bed printing machine.

(e) Draw a neat labelled diagram of a rotary screen printing machine.

(f) Explain the different styles of printing.

(g) Write a note on the Ink jet printing technique.

**2. Attempt any TWO :**

**16**

(a) Give the significance of grey inspection. Explain the working of inspection machines used. Enlist the different inspection systems and their criteria for rejections.

(b) With a neat labelled diagram, explain the working of jigger dyeing machine. Also explain the procedure of dyeing cotton azoic colours.

(c) State the significance and explain procedure of determining the colour fastness to (i) washing and (ii) perspiration

**P.T.O.**

- 3. Attempt any TWO :** **16**
- (a) Describe the conventional method of scouring cotton and compare it with bio-scouring.
  - (b) Explain the dyeing procedure of polyester by (i) High temperature high pressure method and (ii) Thermosol method.
  - (b) Enlist the printing ingredients and state function of each ingredient. (atleast 4)
- 4. Attempt any TWO :** **16**
- (a) Give the procedure of dyeing cotton using vat dyes and reactive dyes. Comment on fastness properties of dyed fabrics.
  - (b) Explain the (i) tie & dye and (ii) batik method of printing in detail.
  - (c) Write a detailed note on the flock printing and foam printing method of textiles.
- 5. Attempt any TWO :** **16**
- (a) What are the objectives of shearing & cropping and singing ? With a neat labelled diagram, explain the working of gas singing machine.
  - (b) Give the procedure for
    - (i) printing of cotton with reactive dyes and
    - (ii) polyester with disperse dyes by direct style of printing.
  - (c) Explain the foil printing and pearl printing of textiles in detail.
- 6. Attempt any TWO :** **16**
- (a) Explain the procedure of bleaching cotton using  $H_2O_2$ . Write its advantages. Explain the method of measuring the whiteness index.
  - (b) Write a note on the classification of dyes based on application and explain direct Dyeing of cotton.
  - (c) Write the procedure of determining the colour fastness to light and rubbing.
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