

**Total Marks: 70**

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

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|------------|---|-----------|
| <b>Q.1</b> | <b>(a)</b> Explain the following terms:                     | <b>03</b> |
|            | i. M.L.R                      ii. Shade percentage          |           |
|            | <b>(b)</b> Write in short on grey fabric inspection.        | <b>04</b> |
|            | <b>(c)</b> Write shorts notes:                              | <b>07</b> |
|            | i. Scouring of colored Woven Goods    ii. Exhausting Agents |           |

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|------------|-----|---|-----------|
| <b>Q.2</b> | (a) | Draw process flow of textile wet processing department.   | <b>03</b> |
|            | (b) | Explain the following terms :   | <b>04</b> |
|            | i.  | Concentration and exhaustion of a dyeing bath.  |           |
|            | ii. | Cross dyeing and Topping  |           |
|            | (c) | Justify the significance of J-box in scouring of cellulosic fibres and their blends with the help of proper sketch and process sequence and parameters. | <b>07</b> |

**OR**

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|------------|-----|--|----|
|            | (c) | Discuss yarn dyeing machines with sketch, process parameters and the precautionary measures.                           | 07 |
| <b>Q.3</b> | (a) | What is singeing and why it is required to be carried out for some of the fabrics?                                     | 03 |
|            | (b) | Provide meaning of following terms:<br>i. Saponification    ii. Surfactant    iii. Mercerization    iv. Emulsification | 04 |
|            | (c) | Write short notes on<br>i. Shearing Process    ii. Padding Mangle  | 07 |

**OR**

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|------------|--|-----------|
| <b>Q.3</b> | (a) Give the advantages of dyeing loose cotton.  | <b>03</b> |
|            | (b) Describe the process of dyeing Polyester fabrics by carrier dyeing.  | <b>04</b> |
|            | (c) Define Dyeing. Classify the Coloring matter. Also write about different types of dyes used for different fibres. | <b>07</b> |

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| <b>Q.4</b> | <b>(a)</b> Explain the objectives of desizing.           | <b>03</b> |
|            | <b>(b)</b> Discuss the process of rot steeping desizing. | <b>04</b> |
|            | <b>(c)</b> Describe Stepwise dyeing of Disperse dyes.    | <b>07</b> |

OR

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|------------|--|-----------|
| <b>Q.4</b> | (a) Give the classification of dyes along with fiber types.  | <b>03</b> |
|            | (b) Write a note on scouring of colored woven goods.   | <b>04</b> |
|            | (c) Discuss, with neat sketch and principle, Jigger Dyeing Machine with its positive and negative aspects. | <b>07</b> |

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|------------|---|-----------|
| <b>Q.5</b> | (a) What is stripping?  | <b>03</b> |
|            | (b) Compare hypochlorite and peroxide bleaching.  | <b>04</b> |
|            | (c) Discuss Hydrogen Peroxide bleaching in relation to its recipe and process conditions. | <b>07</b> |

**OR**

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|------------|--|-----------|
| <b>Q.5</b> | (a) Give the properties of vat dyes.   | <b>03</b> |
|            | (b) Describe the process of dyeing nylon material.   | <b>04</b> |
|            | (c) Explain why desizing is necessary. Enlist various desizing processes. Describe the process of Acid desizing. | <b>07</b> |

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