## 22673

### 23124 3 Hours / 70 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) 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 concept of Bio-technology in processing. 10 (b) List the types of fibres used for manufacturing terry towels. 10 (c) List the names of machines used for knit fabric processing.

- (d) Define the terms Auxochrome and Chromophore.
- (e) Write the working principle of Air flow dyeing machine.
- (f) Draw a diagram of 2 dip-2 nip padding mangle machine.
- (g) Write the concept of auto-dosing system.

#### 2. Attempt any THREE of the following :

- (a) Describe the mechanism of enzyme action on bleaching of the textile fabrics.
- (b) Suggest the precautions needed in processing of the terry towels.
- (c) Elaborate the process sequence for processing of knitted fabrics in tabular form.
- (d) Describe the application method for pigment on cotton fabric.



12

#### **3.** Attempt any THREE of the following :

- (a) With neat sketch, describe the enzymatic desizing of the grey fabrics.
- (b) State the purposes of deactivation of the given enzymes with justifications.
- (c) Differentiate between dyes and pigments in four points.
- (d) Explain the concept of E-control dyeing process.

#### 4. Attempt any THREE of the following :

- (a) Suggest the stepwise procedure for bio-scouring of cotton.
- (b) With suitable sketch describe the working of CBR machine.
- (c) Describe the production process sequence for the terry towels.
- (d) Identify any two problems in knit fabric processing with their remedies.
- (e) Explain the construction and working of continuous dyeing range.

#### 5. Attempt any TWO of the following :

- (a) Classify the specified enzymes with their functions and applications in fabric pretreatments.
- (b) Suggest ecofriendly and economical dyeing procedure for cotton terry towel in suitable machine.
- (c) With neat sketch, describe the working of compacting machine in knit fabric processing.

#### 6. Attempt any TWO of the following :

- (a) Suggest the procedure for dyeing the cotton knit fabric in a soft-flow machine.
- (b) Justify the use of non-sulphide reducing agents in ecofriendly sulphur dyeing.
- (c) Explain the concept of digital printing with suitable sketch. Write its advantages & limitations.

12

12

12

12