

# 22577

**23124**

**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) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

**1. Attempt any FIVE of the following.**

**10**

- State the importance of heat setting.
- Define pilling of textile.
- Define the term "soil".
- State the mechanism of soiling.
- Define the term "foam"
- Define the term
  - % pick up
  - % exhaustion
- State the types of emulsion.

**2. Attempt any THREE of the following.**

**12**

- Enlist various stages of heat setting. State the advantages of each stage.
- Explain the factors affecting on pilling of textile.
- Explain the factors affecting on soiling of textile.
- Describe dynamic foam generation method with neat sketch.

P.T.O.

- 3. Attempt any THREE of the following. 12**
- a) State the heat setting condition for 100% PET and polyester cotton blend with justification.
  - b) Explain the mechanism of soil release for oily soil.
  - c) Described with neat sketch knife on roller coating machine
  - d) With neat sketch describe crabbing of wool.
- 4. Attempt any THREE of the following. 12**
- a) Explain structural changes brought by heat setting.
  - b) Use shrinkage method to evaluate shrinkage in polyester fabric.
  - c) Choose foam finishing method for finishing of denim. Explain with neat sketch.
  - d) Formulate recipe for 100% cotton to get crease recovery finish.
  - e) Explain use of  $\text{TiO}_2$  as nano finish in textile finishing.
- 5. Attempt any TWO of the following. 12**
- a) Explain mechanism of heat setting.
  - b) Use pilling tester to measure pilling tendency of fabric.
  - c) Use carbonisation process for finishing of polyester-cotton blend.
- 6. Attempt any TWO of the following. 12**
- a) Formulate finishing recipe for polyester fabric to get soil release finish.
  - b) Explain factors affecting on soiling of polyester and cotton fabric.
  - c) Distinguish between micro and nano emulsion.
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