15116

3 Hours / 100 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) 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:

20

- a) State the importance and objects of heat setting process in finishing.
- b) Why do synthetic fabrics require heat setting? Enlist various synthetic fabrics and their heat setting temperatures.
- c) State the mechanism of pilling and factors affecting the pilling property of the fabric.
- d) Define the term foam. What is blow ratio? How it is calculated?
- e) State the importance and objects of soil release finishing.
- f) Explain the finishing sequence for special sorts.
- g) Explain the silk finish process for polyester fabric.

2. Attempt any two:

16

- a) Describe the various types of heat setting process and structural changes brought about by heat setting.
- b) Explain various physical and chemical methods applied on the fabrics to minimize pilling.
- c) State the factors affecting the stability of foam and explain the methods of foam application on textiles.

3. Attempt any four:

16

- a) Explain the heat setting conditions for 100% polyester and polyester/cotton blend fabrics.
- b) What is pill? How it affects on the fabric appearance and finish property of the fabric?
- c) Explain the method for evaluation of efficiency of soil release finish.
- d) Describe the process sequence parameters during finishing of knitted goods.
- e) State the concept of macro, micro and nano emulsions for textile finishing.
- f) Explain the process for stone wash effect on denim garments.

4. Attempt any four:

Marks
16

- a) Explain the mechanism of heat setting and stages of heat setting treatments for synthetics.
- b) Give the definition of soil. What are various types of soils? Write down the mechanism of soiling on the textiles.
- c) Describe the various factors affecting soiling of the fabrics.
- d) Explain the finishing of micro denier polyester fabric.
- e) What are various types of machineries used for textile finishing? Describe any one of them.
- f) What is biopolishing? How is it carried on textile fabrics?

5. Attempt any two:

- a) Explain the process parameters and method of evaluation for efficiency of heat setting by shrinkage method.
- b) Explain the importance of foam finishing for various textile fabrics. Write down the advantages and limitations of foam finishing.
- c) Explain in detail the applications of nano technology in textile finishing. Write down its advantages and limitation.

6. Attempt any four:

- a) Explain the properties of foam and the stability of foam.
- b) Write about various types of soil release finishing agents and their application methods for textiles.
- c) Describe the finishing process for woollen and worsted fabrics.
- d) Explain the term micro encapsulation in textile finishing.
- e) Write about latest finishes used in textile market and their advantages over conventional methods.
- f) State the importance of stenter machine in finishing process with its advantages and limitations.