22577

23242

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 soiling.

b) State the objects of heat setting.

c) List out any 2 causes of Pilling.

d) Define Foam Stability with an example.

e) List out any two chemicals required for soft finish of fabrics.

f) List any two specialism finishes.

g) Define the term

(i) 'Nano'

(ii) 'Micro'

Marks

2. Attempt any THREE of the following: **12**

a) Differentiate between Micro and Nano emulsions.

b) Describe the effect of heat setting on the dyeability of Polyester with proper graph.

c) Describe with a neat sketch the mechanism of soil release for oily soil.

d) Compare Grey fabric heat setting process with after dyeing heat setting process with their significance.

3. Attempt any THREE of the following: **12**

a) Describe any four factors affecting soiling of textile with justification.

b) Describe the mechanism of Pill formation in polyester cotton blended fabric.

c) Describe Nano-technology and its concept for the finishing of textiles.

d) Describe with flow chart, the procedure to get finishing formulation for 100% Synthetic Fabrics.

4. Attempt any THREE of the following: **12**

a) Describe with sketch the method of dynamic foam generation.

b) Describe with a neat sketch the process of milling of wool fabrics.

c) Demonstrate the use of lab stentor machine for the measurement of percentage shrinkage of PET fabric.

d) Describe the process and mechanism of weight reduction of polyester.

e) With a neat sketch, demonstrate the changes in properties of polyester due to heat setting temperatures.

Marks

5. Attempt any TWO of the following: **12**

a) Suggest relevant finishing recipe for polyester cotton blended fabric to get permanent soft finish along with its application procedure and mechanism.

b) Apply the shrinkage method for the evaluation of the efficiency of Heat-setting of given 100% PET fabric.

c) Suggest any two relevant physical and chemical methods to reduce pilling in polyester cotton blended fabrics.

6. Attempt any TWO of the following: **12**

a) Suggest relevant foam application method and formulation for finishing of Poly-cotton and Poly-wool blended fabrics.

b) Suggest relevant soil releasing finish formulation its mechanism for polyester and its blends.

c) Suggest relevant finishing technique, the chemicals used along with their methods of application for creating the following :

i) Water Proof and water repellent finish.

ii) Fragrance finish.

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