17469

21314

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. Abbreviations used convey usual meaning.

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

Marks

1. Answer any <u>FIVE</u> of the following: **20**

a) State the objects of finishing. Give classification of finishing with an example of each class.

b) Explain with a diagram the concept of one dip-one nip operation of padding.

c) What are softeners ? Give classification of softeners.

d) What is stiffening ? With examples give classification of stiffeners.

e) Define resins ? State objectives of resin finishing.

f) Classify resins. State the limitations of resin finishing.

g) What are O.B.A.'s ? Write a method of stripping of O.B.A.

Marks

2. Answer any TWO of the following: **16**

a) i) What is calendaring ? 02

ii) With a diagram explain working principle of calendaring machine. 06

b) i) State the properties of cationic and Non-ionic softeners.

ii) Explain mode of action and application of cationic softeners.

c) Describe giving examples, the concept of eco-friendly cross linking agents.

3. Answer any TWO of the following: **16**

a) i) Explain with examples, classification of flame retardants.

ii) Explain the 'Concept of flame proof and flame retardancy'.

b) i) State the objects, requirements and types of antimicrobial finishes. 06

ii) Give desirable properties of a good antimicrobial finish. 02

c) i) What are water proof and water repellent finishes ?

ii) Describe a method of making cotton water repellent.

4. Answer any TWO of the following: **16**

a) With a suitable diagram, explain the working principles of sueding and sanforising machines.

b) i) Name the softeners for cotton, wool, silk and polyster. 02

ii) Describe a method of making soft polyester. 06

c) i) What is the role of catalyst in resin finishing ? Give classification of catalysts.

ii) Explain the concept of Wash-n-Wear finish.

Marks

5. Answer any TWO of the following: **16**

a) Explain the mechanism and application method of OBA for cotton and wool.

b) i) What is L.O.I. ? Explain its importance in flame retardancy.

ii) State the factors affecting flame retardancy.

c) i) What is moth proofing of wool ? 02

ii) Explain a method of evaluating antimicrobial finish. 06

6. Answer any TWO of the following: **16**

a) i) What is biopolishing ? 02

ii) Explain the concept of nano-finishing. 06

b) i) State the essential requirements of a good flame retardant. 02

ii) Name various flame retardants for cotton, polyster and nylon. 03

iii) Describe evaluation of flame retardancy by angular test method. 03

c) i) What is durable press finishing ? 03

ii) Explain evaluation methods of crease recovery angle and DP rating. 05

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