

Scheme - I

Sample Question Paper

Program Name : Diploma in Textile Technology
Program Code : TC
Semester : Fourth
Course Title : Finishing of Natural Substrates
Max. Marks : 70

22460

Time: 3 Hrs.

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FIVE of the following.

10 Marks

- a. State the object of finishing.
- b. State the classification of softener used in finishing.
- c. Enlist the object of resin finishing.
- d. Define optical brightening agent.
- e. State thermal behavior of cotton and polyester fibre.
- f. Define flame proof and flame retardant finish.
- g. State object of antimicrobial finishing.

Q.2 Attempt any Three of the following.

12 Marks

- a. Describe with neat sketch construction and working of stenter machine.
- b. Describe cationic softener used for cotton.
- c. Draw any four chemical structure of cross linking agent used in resin finishing of cotton.
- d. Explain LOI with significance and example.

Q.3) Attempt any Three of the following.

12 Marks

- a. Differentiate between exhaust and padding method of application.
- b. Describe mechanism of reactive softener with cotton fabric.
- c. Explain DMDHEU as cross linking agent with reaction advantages and disadvantages.

- d. State the requirement of good flame retardant.

Q.4) Attempt any Three of the following.

12 Marks

- a. Suggest formaldehyde free cross linking agent for resin finishing of cotton.
- b. Explain the mechanism of catalyst used in resin finishing.
- c. Describe any four factors affecting on flame retardancy properties.
- d. Describe exhaust method for OBA application on cotton fabric.
- e. Enlist the essential requirements of good antimicrobial finish.

Q.5) Attempt any Two of the following.

12 Marks

- a. Explain burning cycle for cotton
- b. Suggest any three chemical with process parameter for steeping of OBA
- c. Suggest antimicrobial with process parameter for cotton fabric.

Q.6) Attempt any Two of the following.

12 Marks

- a. Explain mechanism of crease formation and crease removal in cotton fabric.
- b. Suggest relevant softener 100 % cotton fabric for soft finish with justification.
- c. Calculate amount of chemical and water required for resin finishing of 100 % cotton fabric for following data
 1. Quantity of fabric :- 500 m
 2. GSM :- 150
 3. Width :- 1.5 m
 4. % expression :- 60%
 5. Required finish :- 5 gpl

Scheme - I

Sample Test Paper - I

Program Name : Diploma in Textile Technology
Program Code : TC
Semester : Fourth
Course Title : Finishing of Natural Substrates
Max. Marks : 20

22460

Time: 1 Hour

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FOUR.

08 Marks

- a. State the object of finishing.
- b. Classify finishing process with example.
- c. State object of softener application.
- d. Enlist any two softener used for cotton.
- e. Draw a chemical structure of DMU and DMEDHEU
- f. State process sequence for pre cure and post cure method.

Q.2 Attempt any THREE.

12 Marks

- a. Describe with neat sketch working of calendaring machine.
- b. Explain percentage expression and exhaustion with example.
- c. Explain mechanism of cationic softener for cotton fibre.
- d. Explain mechanism of crease formation in cotton.
- e. Differentiate anti-crease, wash n wear, durable press finishing.

Scheme - I

Sample Test Paper - II

Program Name : Diploma in Textile Technology
Program Code : TC
Semester : Fourth
Course Title : Finishing of Natural Substrates
Max. Marks : 20

22460

Time: 1 Hour

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FOUR.

08 Marks

- a. Define saturation whiteness.
- b. Enlist name of any four OBA
- c. Define LOI with example.
- d. State classification of flame retardant finishing.
- e. State object of antimicrobial finishing.
- f. Enlist any four product of antimicrobial finish.

Q.2 Attempt any THREE.

12 Marks

- a. Describe the mechanism of OBA.
- b. Describe coating theory for flame retardancy of cotton.
- c. Describe the method of evaluating the efficiency flame retardant.
- d. Describe the agar diffusion test for evaluating the efficiency antimicrobial finish.
- e. Describe criteria for good antimicrobial finish.