## Scheme - I

## **Sample Question Paper**

| Program Name        | : Diploma in Textile Technology |              |
|---------------------|---------------------------------|--------------|
| Program Code        | : TC                            | 22576        |
| Semester            | : Fifth                         | 22370        |
| <b>Course Title</b> | : Printing of Synthetic Fibers  |              |
| Max. Marks          | : 70                            | 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.

- a. State the object of Printing.
- b. State the selection criteria of disperse and reactive dyes for printing on p/c blend.
- c. Write the advantages and limitations of disperse-vat system for printing on p/c blend.
- d. Enlist the print paste ingredients with their role for printing on acrylic fabric.
- e. State the selection criteria of disperse dyes based on print fixation method.
- f. State the concept of transfer printing. Enlist various methods of transfer printing.
- g. Classify inkjet printing technology.

#### Q.2 Attempt any Three of the following.

- a. Explain the print fixation mechanism during pressure steaming and high temperature steaming for polyester.
- b. Explain the mechanism of brasso style of printing on p/c blended fabric with suitable reactions.
- c. Describe with neat sketch, flexographic printing technique.
- d. Explain direct style of printing on polyester with suitable formulation for atmospheric steaming fixation method.

### 12 Marks

#### Q.3) Attempt any Three of the following.

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## a. Describe direct style of printing on acrylic fabric with typical formulation.

- b. Describe single dye application on p/c blended fabric.
- c. Describe the procedure for direct style of printing on nylon using metal complex dyes.
- d. Explain resist style of printing on Polyester by alkali method.

## Q.4) Attempt any Three of the following.

- a. Describe the procedure to develop discharge printing effect on acrylic fabric.
- b. With suitable formulation, explain printing of polyester/ wool blended fabric using disperse-acid dyes.
- c. Describe with neat sketch, Drop on demand inkjet printing.
- d. Explain printing of p/c blended fabric using disperse-reactive system by two phase method.
- e. State and explain, the advantages and disadvantages of pressure steaming and thermofixation methods.

## Q.5) Attempt any Two of the following.

- a. Write a note on pigment printing on p/c blended fabric
- b. Describe with sketch, continuous transfer printing machine.
- c. Explain discharge printing on Nylon using disperse dyes with suitable formulation.

## Q.6) Attempt any Two of the following.

- a. Explain discharge printing on polyester with suitable formulation. State the precautions taken during discharge printing.
- b. State the characteristics of paper, dye and ink for transfer printing.
- c. Distinguish between inkjet printing and conventional printing.

#### 12 Marks

## 12 Marks

12 Marks

## Scheme - I

## Sample Test Paper - I

| Program Name        | : Diploma in Textile Technology |              |
|---------------------|---------------------------------|--------------|
| Program Code        | : TC                            |              |
| Semester            | : Fifth                         | 22576        |
| <b>Course Title</b> | : Printing of Synthetic Fibers  |              |
| Max. Marks          | : 20                            | 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.

- a. State the object of Printing.
- b. State the importance of fabric preparation before printing.
- c. Explain the mechanism of print fixation during pressure steaming method.
- d. State the selection criteria of disperse and reactive dyes for printing p/c blended fabric.
- e. State the advantages and limitations of pigment printing
- f. State the process sequence for disperse-vat printing on p/c blended fabric.

#### Q.2 Attempt any THREE.

- a. Explain direct style of printing on PET with suitable formulation.
- b. Describe resist style of printing on PET by chelation method.
- c. Explain single dye application process on p/c blended fabric.
- d. Write a note on Brasso style of printing.
- e. Describe P/W blend printing with suitable formulation.

## 08 Marks

## Scheme - I

## Sample Test Paper - II

| Program Name        | : Diploma in Textile Technology |              |
|---------------------|---------------------------------|--------------|
| Program Code        | : TC                            |              |
| Semester            | : Fifth                         | 225/6        |
| <b>Course Title</b> | : Printing of Synthetic Fibers  |              |
| Max. Marks          | : 20                            | 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.

- a. Enlist the print paste ingredients for direct style of printing on acrylic fabric.
- b. Write the flow chart of preparation of nylon fabric for printing
- c. State the concept of heat transfer and melt transfer printing.
- d. State the mechanism during film release transfer and vapour transfer.
- e. State the advantages of transfer printing over conventional printing.
- f. Enlist two discharging agents with their chemical formulae.

### Q.2 Attempt any THREE.

- a. Explain direct style of printing on acrylic fabric using disperse dyes with suitable formulation.
- b. Explain discharge style of printing on nylon using metal complex dyes.
- c. With neat sketch, explain working of Gravure printing.
- d. State the characteristics of paper and ink for transfer printing.

# 08 Marks