The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note: (i) There are five sections A, B, C, D and E.
   (ii) Attempt any one question each from sections A, B, C and D.
   (iii) Section E is compulsory. Attempt all the questions in this section.

SECTION - A

1. (a) Explain any suitable exhaust method for polyester/cotton blend dyeing with disperse/reactive dyes. (10)
   
   (b) Describe the functions of various parts of a fabric mercerizing machine. (10)

2. (a) Discuss the technology of dyeing polyester/wood blend using one bath dyeing method. (10)
   
   (b) Demonstrate the constructional design of a kier & describe its working. (10)
SECTION - B

3. (a) Describe the method of operation of screen printing giving details of equipments required. (10)

(b) Write down process details of carbonization process. (10)

4. (a) Present an outline of working Roller printing machine. (10)

(b) What are different classes of thickeners used in printing paste? Mention their characteristics. (10)

SECTION - C

5. (a) Describe discharge style of printing. Compare it with direct style. (10)

(b) Discuss the principle of sanforization. (10)

6. (a) Discuss various printing after treatment processes in brief. (10)

(b) Explain the mechanism of transfer printing with the help of diagram. (10)

SECTION - D

7. Mention different chemicals suitable for imparting anticrease characteristics to cotton & explain their mode of working. (20)

8. Define the term water repellancy. Explain how various water repellant chemicals impart this functionality. (20)

SECTION - E

9. (a) What is the role of steaming in printing?

(b) What do you mean by kiering?
(c) What are the various forms in which textile materials are dyed?

(d) Mention various methods of printing.

(e) What are the advantages of block printing?

(f) What is the role of defoaming agent in the printing paste?

(g) Why do we need calendering?

(h) Why crease develops in cotton fabrics?

(i) Classify finishing processes.

(j) What drawbacks are associated with anti-crease finishes?  

\(10 \times 2 = 20\)