[Total No. of Questions - 9] [Total No. of Printed Pages - 2] Dec-22-0141

TE-301 (Textile Machines & Processes) B.Tech-3rd (CBCS)

Time: 3 Hours

Max. Marks: 60

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

Note: Attempt Five questions in all, selecting one question from each Section A, B, C and D. Section E is compulsory.

SECTION A

- 1. Define textile fibres. Explain classification of textile fibre based on their origin. (10)
- 2. Define polymerization. What are the basic requirements of a fibre forming polymer? (10)

SECTION B

- 3. What are the objectives of the spinning machinery used for spinning cotton combed yarn? (10)
- 4. Write short notes on
 - a) Winding
 - b) Sizing

(5+5=10)

SECTION C

- 5. Explain the difference between dyeing and printing. (10)
- 6. Explain primary and secondary motions of weaving. (10)

2 TE-301 SECTION D

(10)

- 7. Explain classification of finishing.
- 8. Explain flame retardant and water repellent finishing. (10)

SECTION E

- 9. Attempt all questions
 - a. What are the objectives of bleaching?
 - b. Define cotton count system.
 - c. Classify synthetic fibres.
 - d. What is the function of twist on plied yarn?
 - e. Enlist the various non conventional weaving processes.
 - f. What two factors enter into the selection of a dye?
 - g. Name various methods of printing.
 - h. Name 5 natural fibres.
 - Define nonwoven fabrics.
 - j. What is the importance of scouring? $(10\times2=20)$