

Code No: 154CZ

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech II Year II Semester Examinations, September/October - 2023

TECHNOLOGY OF KNITS AND NONWOVEN

(Textile Engineering)

Time: 3 Hours

Max. Marks: 75

- Note:** i) Question paper consists of Part A, Part B.
ii) Part A is compulsory, which carries 25 marks. In Part A, answer all questions.
iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A**(25 Marks)**

- 1.a) Define Knitting. Classify Weft Knitting. [2]
- b) Explain the significance of Wall Creels. [3]
- c) How do you represent Single and Double Jersey by Needle diagram? [2]
- d) Explain the need for Positive Feeders. [3]
- e) List any three types of makes of Warp Knitting machines found. [2]
- f) Sketch the fibre arrangement in nonwoven fabrics. [3]
- g) How the air arrangements are made in Air laid webs? [2]
- h) Mention the applications of Polymer laid webs. [3]
- i) Explain the principle of Mechanical Bonding. [2]
- j) What are structured Needle fabrics? [3]

PART – B**(50 Marks)**

2. Compare Knitting with Weaving on most acceptable grounds. [10]
OR
3. Examine the arrangement and threading of different types of Creels in Weft knitting machine. [10]
4. Discuss the Patterning area calculations in Weft Knitting. [10]
OR
5. With neat sketches explain the various types of forces acting on Latch needle in Weft knitting. [10]
6. Explain the different diving arrangements for guide bars in Warp knitting with neat sketches. [10]
OR
7. Giving neat and proportionate sketches, discuss the dry methods of web formation. [10]
8. Give an account of Working of Rando- Webber process. [10]
OR
9. Discuss the arrangements and process of wet laying. [10]
10. Giving various arrangements discuss the Needle punching process. [10]
OR
11. Discuss the Adhesive bonded nonwovens production with neat sketches. [10]