

M.TECH. DEGREE EXAMINATIONS: NOVEMBER 2009

Third Semester

TEXTILE TECHNOLOGY

P07TXE13 Advances in Knitting Technology

Time: Three Hours

Maximum Marks: 100

Answer ALL Questions:-

PART A (10 × 2 = 20 Marks)

1. Compare positive feeder and storage feeder mechanisms based on their principle of working.
2. Write briefly about the cam system of multi track machines?
3. What is meander stem needle? List out its features.
4. State the ill effects of spirality during garment construction.
5. Write about the influence of stitch length on geometry of weft knit structure.
6. Name any four different types of garment length machine.
7. Classify warp knitting machines with respect to number of guide bars.
8. Define the terms over lap and under lap.
9. What is the use of pattern drum in warp knitting?
10. List out few areas of geo textile application of warp knitted fabrics.

PART B (5 × 16 = 80 Marks)

- 11.a) Write a detailed note on weft knitting needle selection techniques.

(OR)

- b) Discuss in detail about the role played by cam design and shape in the performance of weft knitting machines.

- 12.a) Write elaborately about the relaxation behaviour of weft knit fabrics under various dimensionally stable states.

(OR)

- b) Write about the socks geometry and shaping in detail.

- 13.a) Make a detailed discussion on various pattern control mechanisms of warp knitting.

(OR)

- b) Write in detail about the dimensional characteristics of warp knits.

14.a) With neat illustration, discuss about the working of double needle bar simplex and raschel machines.

(OR)

b) Write comprehensively on quality tests generally carried out for weft knitted fabrics.

15.a) Discuss in depth about the yarn quality requirements for weft and warp knitting.

(OR)

b) Write short notes on any two:

- i) High pile
- ii) Fall plate
- iii) Causes for needle breakage
