

B. Tech 8th Semester Examination

Knitting Technology (NS)

TE-423

Time : 3 Hours

Max. Marks : 100

*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 :** Attempt any one question from Section A, B, C and D. Section E is compulsory.

**SECTION - A**

1. With the help of suitable diagrams and examples, compare between warp knitting with weft knitting. Give a broad classification of weft knitting machines and their methods of operation. (20)
2. With the help of neat sketch, explain the actions of multi cam to produce knit design. With the help of neat sketch show the knitting cycle for formation of 1×1 rib fabrics. (20)

**SECTION - B**

3. What do you mean by synchronized and delayed timing? Discuss in detail properties and derivatives of interlock fabrics. (20)
4. What do you mean by basic weft knitted structure? With the help of neat diagram, explain plain, rib, purl and interlock structures. (20)

**SECTION - C**

5. With the help of suitable diagram, explain process of loop formation and different structures produced on flat knitting machines. (20)

6. What is patterning? What are the various devices used for patterning in circular machine? What do you mean by Spirality in knitting? (20)

**SECTION - D**

7. Describe the knitting cycle of a Tricot warp knitting machine with proper diagrams. Give lapping diagrams of Satin, Atlas and queens cord. (20)
8. What do you mean by open lap and closed lap? How they are formed? With the help of neat sketch, discuss the knitting cycle in Raschel warp knitting machine. (20)

**SECTION - E**

9. Attempt all questions.
  - (i) List out various derivatives of Rib.
  - (ii) Define tightness factor.
  - (iii) Explain different types of stitches.
  - (iv) List out various faults occurs in weft knitting fabrics.
  - (v) Define Loop length.
  - (vi) What are knitting needles?
  - (vii) What are the uses of knitting cams?
  - (viii) What is Spirality?
  - (ix) Explain the function of Sinker and pressure bars in knitting.
  - (x) Why are the purl fabrics preferred for making children garments? (10×2=20)