

Dec.-22-0337

TE-701 (Knitting Technology)

B.Tech. 7th (CBCS)

Time : 3 Hours

Max. Marks : 60

*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 Five questions in all, selecting one question from each Section A, B, C and D. Q. No. 9 is compulsory. Use of non-programmable calculators is allowed.

**SECTION - A**

1. Differentiate between weft and warp Knitting. Explain various structural elements of weft knitting process. (10)
2. What are the yarn quality requirements of weft knitting machine? Explain the important mechanical elements of weft knitting process along with their function. (10)

**SECTION - B**

3. With the help of suitable diagram, explain the process of loop formation in Flat-Bed Knitting machine along with their features and structures. (10)
4. Explain various basic structures developed in weft knitting along with their formation and neat diagram. (10)

**SECTION - C**

5. Discuss the geometry of weft knitted fabric along with the dimensional parameters of weft knitting machine. (10)
6. Explain the concept of loop length. With the help of suitable diagram, discuss the working principle of Cams used in knitting

2

TE-701

machines. Also, discuss various fabric faults in weft knitting machine. (10)

**SECTION - D**

7. With the help of neat diagram, discuss the knitting cycle of Rachel warp knitting machine. Also, explain warp knitted fabric geometry. (10)
8. Discuss about the yarn preparation of warp knitting. Explain latest developments in warp knitting machines. (10)

**(Compulsory Question)**

9. Attempt all questions :
  - (a) What is Stitch length?
  - (b) Define rib structure.
  - (c) What is Tightness factor?
  - (d) Differentiate between WPCM & CPCM.
  - (e) Enlist the name of knitting needles.
  - (f) Define Gauge in Circular Knitting Machine.
  - (g) What is a function of Feeder in Take up?
  - (h) Define patterning device.
  - (i) Draw the loop diagram and graphic representation of 2x2 rib structure.
  - (j) What is let off in warp knitting machine? (10x2=20)