

B.TECH DEGREE EXAMINATIONS: MAY/JUNE 2013

Sixth Semester.

TEXTILE TECHNOLOGY

TTX114 : Knitting Technology

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Which one is not a knitting element
 - a) Latch needle
 - b) sinker
 - c) Drop wire
 - d) feeder
2. Which one is not part of warp knitting
 - a) Sinker bar
 - b) Needle bar
 - c) Guide bar
 - d) cylinder
3. Stitch density is
 - a) No of loops in column
 - b) No of loops in row
 - c) No of loops in a square area
 - d) Length of one loop
4. Loop length can be altered using
 - a) Guard cam
 - b) Stitch cam
 - c) Up throw cam
 - d) Running cam
5. Which one is not weft knitted
 - a) rib
 - b) purl
 - c) interlock
 - d) tricot
6. Designs can not be introduced using
 - a) Pattern wheel
 - b) Jacquard
 - c) Punched steel tape
 - d) Single track cam
7. Which structure has less elongation
 - a) Single jersey
 - b) tricot
 - c) interlock
 - d) rib
8. Normal gauge of knitting machine used to produce outer summer garments is
 - a) 10-14
 - b) 24-28
 - c) 32-36
 - d) 6-10

9. Which needle is self acting
 - a) Latch needle
 - b) Bearded needle
 - c) Compound needle
 - d) Sewing needle
10. Which quality of yarn is most preferred for weft knitting
 - a) More twist
 - b) High strength
 - c) Less twist
 - d) Less imperfection

PART B (10 x 2 = 20 Marks)

11. Define warp knitting
12. What is tightness factor?
13. State the various knitting elements?
14. What is the function of sinker?
15. Rib knitted structure is having more elongation .why?
16. What are the faults in knitted fabrics?
17. What is closed lap?
18. Name any four warp knitted structures
19. What is seamless knitting?
20. State few applications of knitted fabrics in medical textiles.

PART C (5 x 14 = 70 Marks)

21. a) Explain the knitting cycle of latch needle with a diagram.

(OR)

 - b) (i) Compare the properties of woven and knitted fabrics. (7)
 - (ii) Compare warp and weft knitting. (7)
22. a) Describe the knitting cam with a diagram? Explain how stitch length can be altered using cam?

(OR)

 - b) Explain the working principle of flat knitting machine with a diagram
23. a) (i) Explain the formation of knit ,tuck and float stitches with suitable diagrams. (7)
- (ii) Describe accordion structure.? (7)

(OR)

 - b) Explain the working principle of punched steel tape mechanism?

24. a) Explain the knitting cycle of tricot warp knitting machine?

(OR)

b) Describe any two basic warp knitted structures?

25. a) Enumerate the various application of weft and warp knitted fabrics in technical textiles.

(OR)

b) Explain the working of seamless knitting machine and its advantages.
