

**B.TECH DEGREE EXAMINATIONS: NOV / DEC 2014**

(Regulation 2009)

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 part of the knitting needle helps the needle to move up and down
  - a) latch
  - b) butt
  - c) shank
  - d) rivet
2. The GSM of inner garments is normally between
  - a) 120 -150 grams
  - b) 150-180grams
  - c) 90-110grams
  - d) 180-220grams
3. The part which helps to change the stitch length is
  - a) Guard cam
  - b) Running cam
  - c) Stitch cam
  - d) Clearing cam
4. The normal loop length of knitted fabric used for T Shirt is
  - a) 2.7mm-3.0mm
  - b) 2.7cm-3.0cm
  - c) 2.7m-3.0m
  - d) 2.7dm-3.0dm
5. The self acting needle is
  - a) Bearded needle
  - b) Compound needle
  - c) Latch needle
  - d) Sinker needle
6. Interlock machine has
  - a) One set of cylinder and dial needles
  - b) Two sets of cylinder needles only
  - c) Two sets of dial needles only
  - d) Two sets of cylinder and dial needles
7. The gauge of circular plain weft knitting machine is usually
  - a) 5-12
  - b) 14-18
  - c) 20-26
  - d) 26-38

8. Positive feeder helps to
  - a) Feed yarn at uniform tension
  - b) decrease yarn tension
  - c) Increase yarn tension
  - d) Feed without yarn tension
9. Sinker loop is the part
  - a) Connecting two legs of same loop
  - b) Connecting two feet belonging adjacent loops
  - c) Connecting the head of same loop
  - d) Vertical portion of loop
10. To knit interlock structure, the cylinder cam should have
  - a) One track
  - b) three tracks only
  - c) four tracks only
  - d) two tracks only

**PART B (10 x 2 = 20 Marks)**

11. Define weft knitting.
12. What is tightness factor?
13. What is purl stitch?
14. What is needle loop?
15. State how stitch density can be altered?
16. Define overlap.
17. Out of warp and weft knitted fabrics which one has more lengthwise elongation and why it is so?
18. State four uses of knitted fabrics in technical textiles.
19. What are the parts used to create design in knitting machine.
20. State three derivatives of warp knit structures.

**PART C (5 x 14 = 70 Marks)**

21. a) Explain the yarn quality requirements for weft knitting.

**(OR)**

- b) Compare the properties of Woven and knitted fabrics and discuss their advantages.

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

**(OR)**

- b) Describe the basic principle and working of flat knitting machine.

23. a) Describe the rib structure with a diagram and explain its characteristics.

**(OR)**

b) Explain the working of pattern drum in creating design.

24. a) Explain any two warp knitted structure formation with neat sketch.

**(OR)**

b) Explain the knitting cycle of tricot warp knitting machine.

25. a) Give a detailed account of the use of weft and warp knitted fabrics in technical textiles.

**(OR)**

b) State the present status of warp and weft knitting industry in india.

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