

**B.TECH. DEGREE EXAMINATIONS: APRIL / MAY 2010**

Fourth Semester

**TEXTILE TECHNOLOGY**

U07TT403: Knitting Technology

**Time: Three hours****Maximum Marks: 100****Answer ALL the Questions:- PART A (10 x 1 = 10 Marks)**

1. Cam track is ..... for needle butt
  - a) Guiding path
  - b) Holding component
  - c) Closing component
  - d) Moving Component
2. Closed loop is a basic unit of .....
  - a) Weft knitted structure
  - b) Warp knitted structure
  - c) Flat knitted structure
  - d) Warp and weft knitted structure
3. Which one of the following stitch cannot be produced by pattern drum
  - a) Knit stitch
  - b) Tuck stitch
  - c) Miss stitch
  - d) Float
4. The Angle of pattern wheel is
  - a) 45°
  - b) 35°
  - c) 48°
  - d) 50°
5. Horizontal stripes in weft knitting is obtained by using
  - a) Fancy yarn
  - b) Knit & Float stitches
  - c) Different colored yarn
  - d) None of above
6. The another name of Half cardigan is
  - a) Polka
  - b) Royal Rib`
  - C) Le coste
  - d) Eight lock
7. Which one of the following its similar to Drop stitch
  - a) Float stitch
  - b) Tuck stitch
  - c) Knit stitch
  - d) None of the above
8. Which one of the following structure is having poor extensibility
  - a) Single jersey
  - b) Rib
  - c) Interlock
  - d) Purl
9. Vertical stripes in warp knitting is obtained by using
  - a) Fancy yarn
  - b) Knit & float stitches
  - c) Different colored yarn
  - d) none of above
10. Which of the following knitted structure is in Artificial Veins?
  - a) weft knitted structure
  - b) warp knitted structure
  - c) flat knitted structure
  - d) warp & weft-knitted structure

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

11. Classify “Warp and Weft Knitting”.
12. Enlist the yarn quality requirements for weft knitting.
13. What are the factors affecting the design depth of jacquard knitting.
14. Give the elements of “Flat Knitting Machine”.
15. Distinguish between “Simultaneous and Sequential Draw Texturing”.

16. Mention the derivatives of weft knit structures.
17. Draw the structure and notation of 2X2 rib structure.
18. Distinguish between “Raschel and Tricot” knitting machine.
19. How will you assess the quality of warp knitted fabrics.
20. What do you mean by “Seamless Knitting”?

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

21. (a) With neat sketch discuss in detail about spring beard, latch and compound knitting needles.

**(OR)**

- (b) Explain in detail about the fundamentals of weft knitting. Also give brief notes on parts and their functions of circular knitting machine.

22. (a) Discuss in detail about the working mechanism of Jacquard knitting machine.

**(OR)**

- (b) Explain in detail about the mechanical and computer controlled flat knitting machine.

23. (a) With neat sketch, explain in detail about the characteristics of plain, rib, interlock and purl knit structure.

**(OR)**

- (b) Write detailed notes on the following:

- (i) Production of various fabric design with flat knitting machine (7)
- (ii) Causes and Remedies of Knitted fabric faults. (7)

24. (a) Give a detailed account on the working principle of warp knitting fundamentals and basic warp knitted structures.

**(OR)**

- (b) Write detailed notes on

- (i) Derivative of warp knit structure (7)
- (ii) Quality of warp knits (7)

25. (a) Explain in detail about the application of warp and weft knitted fabrics for manufacture the technical textile products. (7+7)

**(OR)**

- (b) (i) Compare between Direct and In-Direct warping for warp knitting. (7)

- (ii) Calculate the production (Kg/hr) for interlock knitting machine. (7)

Machine diameter	:	30”
Gauge	:	28
No of feeder	:	96
Machine speed	:	31rpm
Efficiency	:	0.85
GSM	:	100
CPCM	:	17
WPCM	:	14

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