

B.TECH DEGREE EXAMINATIONS: NOV/DEC 2012

Fifth Semester

FASHION TECHNOLOGY

FTY111: Knitted Fabric Manufacture and Structure

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Which knitting needle is least used in knitting
 - a) Latch needle
 - b) Bearded needle
 - c) Compound needle
 - d) Sewing needle
2. Cotton knits are preferred over woven fabrics for sports apparel use mainly due to its
 - a) Crease resistance
 - b) Stretchability
 - c) Tensile strength
 - d) Sewability
3. 2x2 rib is also called as
 - a) Swiss rib
 - b) Polka rib
 - c) Derby rib
 - d) Royal rib
4. Tuck stitched fabric appears
 - a) Thicker, wider than knit stitch
 - b) Thicker than knit stitch
 - c) Thinner ,narrower than knit stitch
 - d) Thinner than knit stitch
5. Eight lock structure is a derivative of
 - a) Interlock
 - b) Rib
 - c) Purl
 - d) Plain
6. Fabric design width up to ----- wales can be produced in full jacquard weft knitting
 - a) 288
 - b) 144
 - c) 48
 - d) 24
7. The lateral movement of guide bar produces
 - a) Chain lap
 - b) Miss lap
 - c) Under lap
 - d) Over lap
8. Raschel structures belong to
 - a) Weft knitting
 - b) Warp knitting
 - c) Jacquard knitting
 - d) Woven structures
9. Majority of technical textile fabrics are produced using
 - a) Tricot structures
 - b) purl
 - c) Raschel structures
 - d) a & c

10. Seamless garment technology
- a) Minimizes waste and time
 - b) Produces more waste
 - c) Consumes more labour
 - d) Consumes more time

PART B (10 x 2 = 20 Marks)

- 11. State the principle of weft knitting.
- 12. Draw a neat sketch of latch needle and name the parts.
- 13. Classify weft knit structures.
- 14. Give the properties of double jersey fabrics.
- 15. Mention the names of few advanced weft knit structures.
- 16. What are blister fabrics?
- 17. Name few warp knitting elements and their functions.
- 18. Give the applications of tricot structures.
- 19. Mention some of the latest developments in weft knitting machines.
- 20. What are seamless garments?

PART C (5 x 14 = 70 Marks)

21. a) Explain in detail with sketches the knitting action of latch needle, bearded needle and compound needle.(14)

(OR)

- b) Classify weft knitting machines and explain the parts and functions of plain and interlock knitting machines.(14)

22. a) Classify weft knit structures and highlight the symbolic and diagrammatic representation of basic weft knit structures. (14)

(OR)

- b) Compare and contrast the properties of single jersey, double jersey and interlock fabrics. (14)

23. a) Discuss the properties and give the diagrammatic representation of the following advanced weft knit structures. (14)

(i) Ponte-di-roma (ii) Cross purl (iii) Ottaman rib

(OR)

- b) Explain briefly on the following jacquard structures. (14)

(i) Rib jacquard (ii) striped backing (iii) birds eye backing.

24. a) With the relevant sketch explain the knitting cycle of Raschel warp knitting machine. (14)

(OR)

b) Give the lapping diagrams, chain notations and properties of the following structures. (14)

(i) Blind lap (ii) Atlas (iii) Lock knit (iv) Satin.

25. a) Discuss elaborately on the latest developments in warp and weft knitting machines. (14)

(OR)

b) Explain the principle and methods of seamless garment manufacture. Give the advantages and applications. (14)
