

B.TECH DEGREE EXAMINATIONS: APRIL/MAY 2014

(Regulation 2009)

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. The most common needle which is used in weft knitting is
 - a) Compound needle
 - b) bearded needle
 - c) a&b
 - d) Latch needle
2. Weft Knitted fabrics are preferred over woven fabrics for cotton apparels due to its
 - a) Stretch ability
 - b) Tensile Strength
 - c) Crease resistance
 - d) a&c
3. Name of the cam in which the needles of weft knitting remain in their fabric plan level
 - a) Clearing cam
 - b) stitch cam
 - c) a&b
 - d) Run in cam
4. The recent development in needle gauge is up to
 - a) 200 G
 - b) 20 G
 - c) 300 G
 - d) 80 G
5. The recent development in knitting cam is
 - a) linear cam
 - b) circular
 - c) Square cam
 - d) Non linear cam
6. In a 2 bar warp knitting if FGB& BGB move in opposite direction but with same magnitude the name of the structure produced is
 - a) Full Tricot
 - b) satin
 - c) queen chord
 - d) b&c
7. The lateral movement of guide bar produces
 - a) Under lap
 - b) overlap
 - c) miss lap
 - d) chain lap
8. The most popular warp knit structure is
 - a) Lock knit
 - b) satin
 - c) queen chord
 - d) shark skin

9. When the guide bar makes neither overlaps nor under laps it is called as
 - a) miss lap
 - b) satin
 - c) Lock knit
 - d) chain lap
10. The quality of warp knitted fabric is the length of fabric produced for a set of --- courses
 - a) 480
 - b) 240
 - c) 960
 - d) 120

PART B (10 x 2 = 20 Marks)

11. Compare the functions of i) Stitch cam ii) Clearing Cam with sketches.
12. Examine the important functions of a sinker.
13. Calculate the loop length for a course length of 1508 cms in a 3016 needles knitting machine.
14. Distinguish the basic stitches in weft knitting.
15. Draw the symbolic notations of 2x2 Rib, 3x3 rib, 1x1 Rib and Plain structures.
16. Recognize the various functional elements of warp knitting.
17. State the suitable end uses of seamless knitted structures.
18. Give the advantages of seamless knitted structures.
19. Differentiate between swinging & shogging movements of guide bars in warp knitting.
20. List the limitations of seamless knitted structures.

PART C (5 x 14 = 70 Marks)

21. a) (i) Draw and explain the knitting cycles with Latch needle. (7)
(ii) Draw and explain the knitting cycles with bearded needle. (7)

(OR)

- b) Compare knitting and weaving with reference to fabric property, process, cost and end uses.

22. a) Compare single jerky, rib and interlock structures with reference to property and end uses.

(OR)

- b) Compare warp knitting and weft knitting with reference to fabric property, process, cost and end uses.

23. a) Explain the structure and properties of MilanoRib, Doublepique and Pique poplin.

(OR)

- b) Explain the structure and properties of ponte-di -roma, single pique and Ottoman Rib.

24. a) (i) Draw and explain the stages of knitting cycles for Tricot warp knitting (7)
(ii) Compare Rachel knitting and Tricot knitting (7)

(OR)

- b) (i) Draw Two bar tricot, Lock knit, Shark skin , Queens cord and Satin with their guide bar notations (8)
(ii) Compare the above structures with reference to their properties and end uses (6)

25. a) Analyze the technological developments in weft knitting for improving the productivity and quality and fabric designs

(OR)

- b) Classify the Warp Knitted Structures that are used in different Technical Textiles field.
