

B.TECH DEGREE EXAMINATIONS: NOV / DEC 2014

(Regulation 2009)

Fourth Semester

FASHION TECHNOLOGY

FTY109: Woven Fabric Manufacture and Structure

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Sizing process is followed by
 - a) Cone winding
 - b) Sizing
 - c) Weaving
 - d) Pirn winding
2. Slough off is not a defect in
 - a) cones
 - b) cops
 - c) fabrics
 - d) pirns
3. Heald frame capacity of dobby looms is
 - a) 10-40
 - b) 5
 - c) 60
 - d) 2
4. Weft insertion rate of projectile looms
 - a) 10-50 m/min
 - b) 1500-2000 m/min
 - c) 200-300 m/min
 - d) 700-900 m/min
5. Denting plan is related to
 - a) reed
 - b) Heald frame
 - c) Warp beam
 - d) Lease rod
6. ----- weave has the maximum number of binding points
 - a) Twill
 - b) Satin
 - c) Plain
 - d) honeycomb
7. Sponge weave is a type of
 - a) Denim
 - b) Poplin
 - c) Terry
 - d) Crepe

8. Perforated fabrics belong to
- | | |
|--------------------|-------------------|
| a) Welt and piques | b) Backed fabrics |
| c) crepe | d) Mock leno |
9. Double cloth weaving is done using
- | | |
|-------------------|------------------|
| a) Skip draft | b) Divided draft |
| c) Straight draft | d) Broken draft |
10. Card cutting is done for
- | | |
|----------------------------------|------------|
| a) warping | b) sizing |
| c) Preparing designs for weaving | d) winding |

PART B (10 x 2 = 20 Marks)

11. State the objectives of warping process.
12. List yarn quality parameters for weaving.
13. Differentiate between single lift and double lift doobby.
14. Give the four major types of shuttleless weft insertion systems.
15. What do you mean by repeat size? Give example.
16. Draw the design of 8 end satin weave.
17. Classify Bedford cords.
18. Differentiate between gauze and leno weaves.
19. Classify different types of double cloth.
20. What do you understand by the term card cutting in jacquards?

PART C (5 x 14 = 70 Marks)

21. a) Explain with a neat sketch the passage of yarn through a sectional warping machine giving the objectives of the process and functions of various elements.

(OR)

- b) Discuss briefly on the various package defects, causes and remedies in various weaving preparatory processes.

22. a) Classify Jacquards. With a neat sketch explain the working of a single lift single cylinder jacquard. Give the type of weaves and fabrics that can be woven.

(OR)

b) Classify jet weaving machines and explain the weft insertion cycle of Airjet weaving machine. Give the air quality requirements.

23. a) Draw the design, draft and peg plan of the following weaves/fabrics and give their construction details
- (i) 2/3 warp rib
 - (ii) Oxford shirting
 - (iii) Gabardine suiting
 - (iv) Ordinary honey comb
 - (v) 5 end satin (use 3 or 5 move no)

(OR)

b) Draw the design of any three derivatives of twill weave. Give their end uses.

24. a) (i) Give design, draft and peg plan for 8x8 mock leno weave. Give its applications. (7)
- (ii) Construct a corded velveteen with a suitable repeat size and using pile to ground weft ratio of 2:1 (7)

(OR)

b) Give the design, draft and peg plan for a 4 pick terry structure. Discuss the pile formation mechanism in terry, its loom requirements and quality particulars of fabrics.

25. a) Discuss the various types of double cloth and highlight the principles of construction with neat sketches.

(OR)

b) Construct a self stitched double cloth stitching from face to back with following particulars. Give the end uses/cloth particulars.

Face weave : 4 end irregular sateen

Back weave: 4 end irregular sateen

Ratio of face to back threads: 1:1
