

Scheme – E

Sample Question Paper

Course Name : Diploma in Fashion & Clothing Technology

Course Code : DC

Semester : Third

Subject Title : Knitted Fabric Design and Technology

Marks : 100

12434

Time: 3 Hrs.

Instructions:

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

Q.1) Answer TEN from the following.

20 Marks

- a) List the various ways of fabric manufacture and draw one structure.
- b) State the meaning of coarse and walk and draw their structure.
- c) Draw the link diagram notation of single jersey fabric.
- d) Draw the needle arrangement and cylinder arrangement for Rib fabric.
- e) What is difference in Rib gaiting and interlock gaiting n.r.t. cylinder arrangement and needle arrangement?
- f) List the principal attaches used in weft knitting and draw their symbolic notation.
- g) State the following term
 - i) Overlap
 - ii) underlap
- h) Name the following Notations
 - i) X
 - ii) O
 - iii) -v-
 - iv)
- I) Calculate total No. of needles in cylinder bed if cylinder dia is 30 inch and machine gauge is 24.
- j) Define “NAP”? Write the symbol for NAP.
- k) Define “Stretch Factor” ?Which is the most stretchable fabric.
- l) What is Negative Ease? Give one - example.

Q.2) Answer any four from the following.

16 Marks

- a) Compare properties of knits with woven write following points.
 - i) Stretch ii) Dimensional Stability
 - iii) crease resistance iv) air permeability
- b) List the three types of needles used in weft knitting and describe with leg. Cycles of latech needle.
- c) Draw the diagrammatic notation for following structures
 - i) Single jeresy ii) 1 X 1 Rib Fabric
 - iii) Purl Fabric (1X1) iv) 1 x1 interlock fabric
- d) Compare weft knitting and warp knitting (write 8 points)
- e) Draw neat sketch of Linker and describe its Functions.
- f) Write down the effect of tuck stitch and float stitch on fabric properties.

Q.3) Answer any Four from the following.

16 Marks

- a) Describe the construction features of cylinder
- b) Draw and state the operation cycles involved in Rib fabric.
- c) Write down the four application of warp knit fabrics.
- d) List and describe the types of knits on basis of stretch direction.
- e) Paraphrase general consideration to be taken on marker making o knits.
- f) Distinguish between “Fully fashioned & cut – stitch- shape knit gament

Q.4) Answer any FOUR from the following.

16 Marks

- a) Write down four characteristic features of interlock fabrics
- b) Draw the diagrammatic notation of LA- COSTE structure and show its needles order, cam order.
- c) Study the following mileno Rib structure, redraw the correct structure and fix it needle order and cam order for redrawn structure.
- d) State the meaning of stripper in weft knitting and draw its digram.
- e) Write down the delination, causes for following defects in weft knitting.
 - i) Holes ii) Drap stitches iii) vertical lines iv) Barre
- f) A knitting machine is running with following
 - i) Machine speed: - 20 courses per min
 - ii) No. of feeders: - 12
 - iii) C.P.I :- 27

iv) Yarn count :- 25 Nc

then calculate its production in terms of yards/ hr and kgs / hrs.

Q.5) Answer any FOUR from the following.

16 Marks

- a) Draw interlocking diagram of 1 x 1 Rib and 3 x 2 Rib fabrics.
- b) State the concept of Reliant technique.
- c) List all elements of Raschel machine and Describe Function of any two elements.
- d) Compare tricot and Raschel machine W.r.t. machine gauge, yarn type, needle type
No. of guide bars.
- e) List the principal stitches of warp knitting and Describe pillar stitch.
- f) Summarise the “Grading rules” for knits.

Q.6) Answer any FOUR from the following.

16 Marks

- a) Draw the neat diagram of Raschel machine and label its parts.
- b) Describe the functionality of “Superimpose and flat seam for knits.
- c) State the concept of plush fabric in weft knitting.
- d) List eight quality test for weft knit fabrics & state the angle of spirality.
- e) Paraphrase the calibrations Required to make a close fitted knit garment
- f) Draw the eight lock structure and state the structure feeder wise.