

**Scheme –I**

**Sample Question Paper**

**Programme Name : Diploma in Fashion and Clothing Technology**

**Programme Code : DC**

**Semester : Third**

**Course Title : Knitted and Non -Woven Fabric Technology**

**Marks : 70**

22357

**Time: 3 Hrs.**

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**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) Attempt any FIVE of the following.**

**10 Marks**

- a) Define the term “Course” and “Wale”.
- b) Sketch the Loop structure for Single Jersey Fabric.
- c) State the concept of “C.P.I” and “W.P.I.”
- d) State the concept of “Non Woven Fabric”..
- e) Define the “Warp Knitting”.
- f) State the Properties of non woven fabric.
- g) Sketch needle arrangement and trick arrangement diagram for 1 X 1 Rib machine

**Q.2) Attempt any THREE of the following.**

**12 Marks**

- a) Classify the weft knitted fabrics based on their structures.
- b) Compare the woven and knitted fabric based on their Structure, Fabric Properties, Manufacturing Principle, application.
- c) State the Features of Interlock machine.
- d) List The Functions of Following elements on knitting machine.

- |             |            |
|-------------|------------|
| 1. Cylinder | 3.Spreader |
| 2. Cam      | 4. Feeder  |

**Q.3) Attempt any THREE of the following.**

**12 Marks**

- a) List the four methods to represent knitted fabric on paper and describe each method with relevant sketch.
- b) Describe with sketch concept of Fabric “Spriality” and “Skewnes”.
- c) Describe the method to determine the stitch length of knitted fabric.
- d) Sate the Functions of “Needle Bar ” and “Guide Bar” on warp knitting machine.

**Q.4) Attempt any THREE of the following.**

**12 Marks**

- a) Compare the warp and weft knitting with regards to intermeshing principle, application, properties, and feed package.

- b) Describe with sketch needle punching method to produce the non woven fabric.
- c) Suggest lapping diagram for following chain notations of warp knitted fabric,
  - i. 1-0/1-2//
  - ii. 1-2/1-0//
- d) Suggest the favorable properties of nonwoven fabrics for apparel sector.
- e) Describe with sketch the “Lapping Method” to represent warp knitted fabric on paper.

**Q.5) Attempt any TWO of the following.**

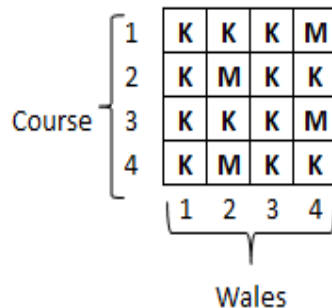
**12 Marks**

- a) Describe with sketch the passage of yarn through flat knitting machine.
- b) Describe with sketch following ornamented knitted,
  - i. La-Coste
  - ii. Milano rib
  - iii. Ottoman rib
- c) Determine the Course length and G.S.M for following knitted fabric,
  - i. Stitch Length: 3 mm
  - ii. C.P.I : 30
  - iii. W.P.I: 24
  - iv. Yarn Count: 40 Ne
  - v. Total No of loops in a Course: 2000.

**Q.6) Attempt any TWO of the following.**

**12 Marks**

- a) Suggest the loop structure for following knitted fabric.
  - 1. 1X 1 Rib Fabric
  - 2. 2 X 2 Rib Fabric
  - 3. 1X 1 Interlock Fabric
- b) Develop needle order and cam order for following knitted fabric,



- c) State the applications of warp knitted fabrics in apparel sector.

**Scheme –I**

**Sample Test Paper - I**

**Programme Name : Diploma in Fashion and Clothing Technology**

**Programme Code : DC**

**Semester : Third**

**Course Title : Knitted and Non -Woven Fabric Technology**

**Marks : 20**

22357

**Time: 1 Hour**

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**Instructions:**

- (1) All questions are compulsory.
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- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

**Q.1 Attempt any FOUR.**

**08 Marks**

- a) Define “Needle Loop” and “Face Loop”
- b) List different methods to produce the fabric.
- c) Draw the needle arrangement diagram for 1X 1 Rib machine.
- d) State the principle of weft knitting with relevant sketch.
- e) List the principle stitches of weft knitting and sketch their line diagram.
- f) Classify the weft knitted fabrics based on their structure.
- g) Calculate the course length if knitting machine is running with following specification,
  - a. Stitch length-2.5 mm
  - b. Total number of Needles-2500
- h) Express the symbolic notation for “Face” and “Back” loop.

**Q.2 Attempt any THREE.**

**12 Marks**

- a) Sketch loop diagram for single jersey fabric.
- b) Compare woven fabric with knitted fabric based on properties, method of producing the fabric.
- c) State the principle of flat knitting machine.
- d) Describe with sketch the concept of course and wale.
- e) State the effect of tuck and miss stitch on knitted fabric property.
- f) Suggest the loop diagram for Two thread and Three thread fleecy fabric.

**Scheme –I**

**Sample Test Paper - II**

**Programme Name : Diploma in Fashion and Clothing Technology**

**Programme Code : DC**

**Semester : Third**

**Course Title : Knitted and Non -Woven Fabric Technology**

**Marks : 20**

22357

**Time: 1 Hour**

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**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 Attempt any FOUR.**

**08 Marks**

- a) Define “Angle of Spriality.”
- b) State the concept of “Fabric Barre”
- c) Define “Tightness Factor”
- d) List different elements of warp knitting machine.
- e) Describe with sketch the concept of warp knitting machine.
- f) State the properties of Non woven fabric.

**Q.2 Attempt any THREE.**

**12Marks**

- a) Calculate the G.S.M of knitted fabric if knitting machine is running with 30 C.P.I and 24 W.P.I with 3 mm stitch length and knits with 40 Ne.
- b) Determine the 108 feeder knitting machine production in Yards/shift if knitting machine running with 24 cylinders R.P.M and C.P.I is 30.
- c) Describe with sketch the functions of Guide bar in warp knitting machine.
- d) Explain with sketch the method to represent the warp knitted fabric on paper.
- e) Sketch the neat diagram of needle punching machine.
- f) State the different applications of warp knitted fabric.