

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V • EXAMINATION – WINTER • 2014****Subject Code: 152903****Date: 03-12-2014****Subject Name: Fabric Structure - I****Time: 10.30 am - 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** How are crepe fabrics characterized? State the methods used to construct crepe weaves. With the help of example, explain any one method to obtain crepe weave. **07**
- (b)** Give the classification of Bedford Cords. With the help of an example, explain how Wadded Bedford cords are constructed. **07**
- Q.2 (a)** Give the possible move numbers, if a regular sateen is to be constructed on 14 x 14. Give design, draft & peg plan for regular sateen on 14 x 14. **07**
- (b)** Give the characteristics of: **07**
- i. Voile fabrics.
 - ii. Seersucker fabrics.
- OR**
- (b)** Give design, draft & peg plan for the following: **07**
- i. Diaper on 12 x 12 (with minimum possible healdshafts)
 - ii. Diamond on 12 x 12 using diamond base
- Q.3 (a)** Give only designs for the following: **04**
- i. Warp Corkscrew on 7 x 7
 - ii. Horizontal Extension on 5 thread Sateen.
- (b)** Construct only design and cross-section for the following: **10**
- i. Warp Way Distorted Effect
 - ii. Ordinary Welt on 6 picks.
- OR**
- Q.3 (a)** With the help of design, explain how waved piques are formed. **07**
- (b)** Distinguish between Simple & Compound Fabrics. **07**
- Q.4 (a)** What is the importance of fabric structure? What information is obtained from Design, Draft and Peg-plan? **07**
- (b)** Construct only design and cross-section for the following: **07**
- i. Regular and Irregular weft rib
 - ii. Regular and Irregular warp rib
- OR**
- Q.4 (a)** Construct design, draft and peg-plan for the Honey comb. **07**
- (b)** Construct only design for the following: **07**
- i. Stitched Hopsack
 - ii. Hopsack and twill combination
 - iii. Elongated twill on 15⁰
- Q.5 (a)** Explain in detail relative firmness of twill weave with suitable example. **07**
- (b)** Construct design, draft and peg-plan for the Herringbone twill. **07**
- OR**
- Q.5 (a)** Construct design, draft and peg-plan for the Brighton Honey comb. **07**
- (b)** Construct only design for the broken twill. **03**

(c) Explain how twill can be constructed with prominent effect.

04
