

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-V • EXAMINATION – SUMMER 2013****Subject Code: 152903****Date: 21-05-2013****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) Explain different methods of producing rib & cord effect in plain weave. **07**  
 (b) With suitable designs, explain different methods of constructing diamond weave. **07**

- Q.2** (a) Draw Design & Cross section of Regular Warp rib & irregular weft rib. **07**  
 (b) Construct design, draft & pegplan for Honeycomb with equal cell formation. **07**

**OR**

- (b) How is a crepe fabric characterized? Explain giving examples how reversing principle is used to obtain crepe weave. **07**

- Q.3** (a) Discuss different keyfactors affecting twill angle. Hence, construct angle of  $63^\circ$  if given (base twill is 5/5.) **07**  
 (b) Give design, draft & peg plan for the following: **07**  
 i. Horizontal Extension of 5 thread Sateen  
 ii. Regular Satin on 10 x 10

**OR**

- Q.3** (a) Draw design, draft, pegplan & denting of mockleno. **07**  
 (b) Give design, draft & peg plan for the following: **07**  
 i. Ordinary Bedford Cord(give cross section also)  
 ii. Venetian

- Q.4** (a) Draw design, draft & pegplan of broken twill with horizontal effect. **07**  
 (b) Distinguish between Simple & Compound Fabrics. **07**

**OR**

- Q.4** (a) Construct only design for the following: **07**  
 i. Wavy twill  
 ii. Stitched hopsack  
 iii. Transposed twill

- Q.4** (b) Write a brief note on Seersucker fabrics. **07**

- Q.5** (a) Construct only design for the following: **07**  
 i. Herringbone twill  
 ii. Hopsack & twill combination  
 iii. Huck-a-back  
 (b) Explain, with the help of design, how warp way distorted thread effect is obtained. **07**

**OR**

- Q.5** (a) Discuss relative firmness of twill weave. **07**  
 (b) Give design, draft, pegplan and cross-section for weft wadded welts. **07**

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