Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V (NEW) - EXAMINATION - SUMMER 2016 Subject Code:2152903 Date: 09/05/2016 Subject Name: Fabric Structure-I Time:02:30 PM to 05:00 PM **Total Marks: 70 Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. 0.1 Construt only design and draft of wavy twill (zigzag twill). 07 (a) Draw design, draft pegpan and cross-section of irregular hopsack on 12x12. 07 **(b) Q.2** Construct only design for the following; 07 (a) 1. Hopsack and rib combination 2. Transposed twill Construct only design and cross-section for the following; **07 (b)** 1. Regular warp rib 2. Irregular weft rib OR Construct only design for the I and II: 07 **(b)** 1. Elongated twill on 27⁰ 2. Elongated twill on 75⁰ 3. write the formula to calculate twill angle **Q.3** Explain, how 3/1 twill cab be produced with subdued and intermediate effect. 07 (a) State the difference between wavy and herrigbone twill. 03 **(b)** What information is obtained from draft and peg plan. (c) 04 Which weaves are towelling weaves? Why? What are the charateristics of **Q.3** (a) 07 towelling fabric? **(b)** Construct one design for each of towelling weaves. 07 Discuss the classification of fabrics based on the method of producing them. 07 **Q.4** (a) Design your own spot and distribute it on 4 end irregular sateen principle over **(b)** 07 20 ends and 20 picks. OR What do you mean by complimentary weaves wrt to sateen. Explain giving 0.4 **07** (a) suitable designs. How is a diamond weave charaterised? State the methods for developing the **(b)** 07 same. Construct a diamond on 16 x 16 using any one method. **Q.5 07** (a) Construct only design and cross-section for the following: 1. Warp Way Distorted Thread Effect. 2. 6 pick Ordinary Welt Structure. Give the classification of Bedford cords. Explain giving designs the **07 (b)** construction of ordinary bedford cords with pair of picks & alternate picks. OR Give only designs for the following: **Q.5** (a) 07 1. Crepe weave using reversing priciple 2. Weft corksrew on 7 x 7 Write a brief note on "Fabrics with approximately plain variety(wrt cover)" 07

(b)