GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) - EXAMINATION - SUMMER 2016

Subject Code:2162903 Date:06/05/2016 **Subject Name: Physical Testing-II** Time: 10:30 AM to 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. 0.1 With the help of neat sketch, explain the principle, construction and working of (a) 07 Hydraulic Bursting Strength Tester. With the help of neat sketch, explain the principle, construction and working of 07 **(b)** Drapemeter. **Q.2** Define the following terms: **07** (a) **Breaking Load** Tenacity Fabric Assistance **(b)** Write a brief note on "Methods of load applications for Tensile Testing of 07 Textiles". OR Write a brief note on "Factors affecting Tensile Properties of Textiles". 07 **(b)** Q.3 With the help of neat sketch, explain the principle of working of Instron. 07 (a) Discuss any 3 methods of measuring Tearing Strength of fabrics in detail. **(b)** 07 0.3 With the help of neat sketches, explain the quadrant balance for measuring (a) 07 Fabric GSM. Write a brief note on "Measurement of Water Proofness of Fabrics". 07 **(b)** Define the terms Bending Modulus & Flexural Rigidity. Also give their **Q.4** (a) 07 significance. With the help of neat sketches, explain the Crease Recovery Tester in detail. **(b)** 07 OR **Q.4** (a) Write a brief note on "Measurement of Air Permeability of Fabrics". 07 With the help of neat sketch, explain the Thickness Guage. **(b)** 07 Discuss the methods used for determining the threads per inch in fabric. 0.5 (a) 07 Write a brief note on "Yarn crimp & its measurement" **(b)** 07 With the help of neat sketch, explain the principle, construction and working of **Q.5** (a) 07 Pillbox Tester. Write a brief note on "Measurement of Abrasion Resistance of Fabrics" **(b)** 07
