

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V • EXAMINATION – WINTER 2013****Subject Code: 152905****Date: 09-12-2013****Subject Name: Textile Manufacturing Processes****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 briefly the principles of various techniques utilized for spinning a yarn. **07**
(b) Compare the properties of Woven, Non-woven and Knitted fabric. **07**
- Q.2** (a) Explain the objectives of Spreading, Cutting and Marker planning process in manufacturing of Garment. **07**
(b) Discuss briefly the special features of Rapier, Air-jet and Projectile loom. **07**
- OR**
- (b) Compare Shuttle and Shuttleless weaving. **07**
- Q.3** (a) Discuss how twisting and winding is carried out simultaneously on a Ring frame. **07**
(b) Explain the principle of Friction spinning. **07**
- OR**
- Q.3** (a) Explain the functioning of rotor in an Open End spinning machine. **07**
(b) Discuss the features of Dref-2 and Dref-3 spinning. **07**
- Q.4** (a) Discuss the objectives of Shedding, Picking and Beat-up process on loom. **07**
(b) Explain the various stages involved in manufacturing of Non-woven fabric. **07**
- OR**
- Q.4** (a) Discuss the various problems that might occur during weaving process and explain how it can be overcome. **07**
(b) Name the various bonding methods for production of Non-wovens and explain any one in detail. **07**
- Q.5** (a) Write short note on Seams and Stitches. **07**
(b) Discuss the various quality check points during the manufacturing of garments. **07**
- OR**
- Q.5** (a) Name the various parts of sewing machine and state their objectives. **07**
(b) Explain the sequence of operation followed for manufacturing of Knitted fabric. **07**
