

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V • EXAMINATION – SUMMER 2013****Subject Code: 152905****Date: 23-05-2013****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) State the various techniques of spinning and explain any one technique in detail with suitable diagram. **07**
(b) State and explain the various techniques adopted to manufacture fabric. **07**
- Q.2** (a) Explain briefly the various stages involved in Garment Manufacturing process. **07**
(b) Explain the Primary and Secondary motions of the loom. **07**
- OR**
- (b) Compare Shuttle and Shuttle-less weaving. **07**
- Q.3** (a) State the objectives of Ring frame and explain the working of Ring frame machine. **07**
(b) Explain the principle of Rotor spinning and compare the properties of Ring and Rotor yarn. **07**
- OR**
- Q.3** (a) Explain the principle of Friction spinning and write on Dref-2 spinning. **07**
(b) With a neat sketch explain the working of Air-jet spinning machine. **07**
- Q.4** (a) With a neat sketch explain the principle and working of shuttle loom. **07**
(b) State the objectives of Cutting department of a Garment Manufacturing unit and explain how the quality is assured at each stage of manufacture. **07**
- OR**
- Q.4** (a) Explain the principle and working of Air-jet loom and state how it is different from projectile and rapier loom. **07**
(b) Define Seams and Stitches. State the various types of Seams and Stitches and state the objectives of different parts of a Stitching machine. **07**
- Q.5** (a) Compare the properties of Woven, Non-woven and Knitted fabric. **07**
(b) Explain the principle of Knitting. **07**
- OR**
- Q.5** (a) With a neat sketch show the passage of warp yarn on a weaving loom and state the objectives of each part. **07**
(b) Write on the stages involved in manufacturing Non-woven fabric. **07**
