

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (Old) EXAMINATION – WINTER 2019****Subject Code: 172902****Date: 30/11/2019****Subject Name: Modern Weaving Technology****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.

- Q.1** (a) Discuss in detail with the help of neat diagrams different types of selvages formed on shuttle-less looms. **07**
- (b) What do you mean by WIR and WUR? Explain accumulators with suitable diagram. **07**
- Q.2** (a) Discuss pre-requisites of water jet loom. Also discuss advantages and disadvantages of water jet loom **07**
- (b) Write short note on multiphase loom. **07**
- OR**
- (b) Describe about creel of modern warping machines. **07**
- Q.3** (a) Discuss in detail about the types of Projectiles. **07**
- (b) Explain picking mechanism of projectile weaving machine with a neat sketch. **07**
- OR**
- Q.3** (a) Explain and Compare beat-up mechanism of projectile loom with that of ordinary shuttle loom. **07**
- (b) Explain the modern developments on air-jet looms. **07**
- Q.4** (a) What are the differences between Dewas system and Gabler system of rapier looms. **07**
- (b) With the help of neat diagrams, explain the driving mechanism used on rigid rapier loom to drive the rapier head in detail. **07**
- OR**
- Q.4** (a) What type of fabric is woven on air jet weaving machine. Explain blowing sequence of relay nozzles and lining control. **07**
- (b) Give various equations of drag force acting on the weft yarn on an air jet loom? **07**
- Q.5** (a) Explain the path of yarn of water jet loom in warp and weft direction. **07**
- (b) Write a short note on drying of fabric in water jet weaving machine. Quality of water needed and water jet width. **07**
- OR**
- Q.5** (a) Write short note on recent development in winding machine. **07**
- (b) Highlight in detail the features of the State-of-the-art sizing machines. **07**
