

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII EXAMINATION – WINTER 2015

Subject Code: 172902**Date:12/12/2015****Subject Name: Modern Weaving Technology****Time: 10:30am to 1:00pm****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 importance of Accumulators. Explain WIR and WUR. By taking suitable data give values of WIR and WUR on different type of looms. **07**
- (b) Discuss on filament sizing. **07**
- Q.2** (a) State the limitations of shuttle looms. Also, state the requisites for installation of shuttleless looms. **07**
- (b) Discuss in short on Propack, Variopack, Ecopack and Auto Tense in relation with Autoconer winding machine. **07**
- OR**
- (b) Discuss on creel of modern warping machines. **07**
- Q.3** (a) Discuss pre-requisites of water jet loom. Also discuss advantages and disadvantages of water jet loom. **07**
- (b) Write short note on Multiphase looms. **07**
- OR**
- Q.3** (a) With neat sketch explain working of picking mechanism of water jet loom. **07**
- (b) Compare triaxial weaving with normal weaving operation. Explain the principle of working of triaxial weaving in detail. **07**
- Q.4** (a) With a neat sketch explain working of any one type of rapier drive. How stroke is adjusted? **07**
- (b) What are the provisions on modern air jet weaving machines for stable weft insertion? With change in speed how the propelling force is to be adjusted? State its relation with other parameters. **07**
- OR**
- Q.4** (a) With a neat sketch explain tip transfer and loop transfer mechanism on rapier loom. **07**
- (b) With a neat sketch explain weft insertion system of confusor based Airjet loom. Also give loom timing diagram. **07**
- Q.5** (a) Discuss in short on braking mechanism on projectile loom. Also write in short on tucked in selvage as formed on projectile loom. **07**
- (b) Write in detail on various possibilities available with shedding mechanisms of projectile loom. **07**
- OR**
- Q.5** (a) With a neat sketch explain working of picking mechanism of projectile loom. **07**
- (b) State the importance of selvages and hence explain different types of selvages produced on shuttleless looms in detail. **07**
