

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV (New) EXAMINATION – WINTER 2015

Subject Code:2142902**Date:01/01/2016****Subject Name: Weaving Technology I****Time: 02:30pm to 05:00pm****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) Mention the process flow chart of yarn preparatory department and explain it briefly. **07**
 (b) Enlist objects and explain passage of yarn through drum winding machine with neat sketch. **07**
- Q.2** (a) State the objects and explain passage of material through ordinary warping machine with diagram. **07**
 (b) Explain with a neat sketch passage of warp through two cylinder slasher sizing machine. **07**
- OR**
- (b) Explain traversing, traverse within traverse and bunching mechanism to build up package of pirn winding machine. **07**
- Q.3** (a) State the objects and explain multiplicative type of tensioner with diagram. **07**
 (b) Define following terms related to winding process: 1) cone angle 2) coil angle 3) complimentary angle 4) traverse length 5) wind 6) traverse ratio and 7) patterning. **07**
- OR**
- Q.3** (a) Give classification of yarn clearer and explain mechanical yarn clearer with a neat diagram **07**
 (b) Explain clearing efficiency, knot factor and retained splice strength to evaluate performance of winding machine. **07**
- Q.4** (a) Explain warping and beaming process of sectional warping machine with diagram. **07**
 (b) Explain different type of warping creel with diagram. **07**
- OR**
- Q.4** (a) Explain the passage of material through pirn winding machine with suitable diagram. **07**
 (b) Explain various types of controls provided on modern sizing machine. **07**
- Q.5** (a) Explain single end sizing machine briefly with diagram. **07**
 (b) Explain sizing ingredients and its function briefly. **07**
- OR**
- Q.5** (a) How do you calculate production of winding machine? Explain with suitable example. **07**
 (b) Explain drawing in and denting process with diagram. **07**
