Seat No.: _____ Enrolment No._____

# GUJARAT TECHNOLOGICAL UNIVERSITY

**ME - SEMESTER– I (OLD course)• EXAMINATION – SUMMER 2015**

**Subject Code: 712503** **Date: 13/05/2015**

**Subject Name: Modern Weaving Technology**

**Time: 10:30 am to 1:00 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 the modern concept of pre-wetting at sizing process. | 07 |
| | (b)) | Give loom-timing diagram of any shuttlelesss loom. | 07 |
| Q.2 | (a) | Discuss about the Modern warping creels. | 07 |
| | (b) | Give the features of multiphase weaving technique. | 07 |
| | | **OR** | |
| | (b) | Discuss in detail about causes of warp & weft breaks on Air-jet loom. | 07 |
| Q.3 | (a) | Explain the formation of tucked in selvedge at sulzer loom weaving. | 07 |
| | (b) | Explain cycle of operation of projectiles on projectile loom. | 07 |
| | | **OR** | |
| Q.3 | (a) | Write a note on-Projectiles. | 07 |
| | (b) | How QSC can be exercised on modern looms? Give it's usefulness. | 07 |
| Q.4 | (a) | Explain about torsion bar picking in Sulzer weaving. | 07 |
| | (b) | Write a note on Accumulators. | 07 |
| | | **OR** | |
| Q.4 | (a) | What type of water is used for Water-jet weaving? Explain it's picking mechanism. | 07 |
| | (b) | Explain drive & let-off in context to Rapier loom. | 07 |
| Q.5 | (a) | Explain force and acceleration of Projectile with suitable graph. | 07 |
| | (b) | What measures would you like to suggest to overcome the most common problem of starting mark for air-jet denim weaving? | 07 |
| | | **OR** | |
| Q.5 | (a) | Write a note on ELO and ETO. | 07 |
| | (b) | Explain the shedding & beating of multiphase weaving machine. | 07 |