

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2172902

Date: 29/04/2017

Subject Name: Modern Weaving Technology

Time: 02.30 PM to 05.00 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 and Compare beat-up mechanism of Projectile loom with that of ordinary shuttle loom. **07**  
(b) Explain various types of weft supply packages used on shuttleless looms and their requirements. **07**
- Q.2** (a) Give classification of Rapier looms. **04**  
(b) Explain with neat diagram principle of working of flexible double rapier tip transfer weft insertion system. **10**
- OR**
- (b) Discuss in detail with the help of neat diagrams different types of Selvedges formed on shuttleless looms. **10**
- Q.3** (a) State the advantages of Multiphase loom over single phase loom. **04**  
(b) With the help of neat diagram, explain the beat-up mechanism of M8300 Multiphase loom in detail. **10**
- OR**
- Q.3** (a) State the importance of weft tensioners used on shuttleless looms. **04**  
(b) With the help of neat diagram explain different stages of operation of circulation of gripper on Projectile weaving machine in detail. **10**
- Q.4** (a) Discuss in detail the principle & benefits of Wet-in-wet (wet size sow box). **06**  
(b) Discuss in detail the traverse aids for maintaining air flow in Air Jet weaving. **08**
- OR**
- Q.4** (a) Highlight the innovations in the area of Beam drive in Warping machine. **08**  
(b) What are the limitations of Water jet looms? **06**
- Q.5** (a) Discuss in detail the functional characteristics of modern air-jet weaving machines. **10**  
(b) Discuss pre-requisites of Water Jet Loom. **04**
- OR**
- Q.5** (a) Discuss the essential requirements for successful air jet weft insertion. **10**  
(b) Write in brief about Propack in relation with Autoconer winding machine. **04**

\*\*\*\*\*