

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

Subject Code:132902**Date:18/12/2015****Subject Name: YARN MANUFACTURING I****Time: 2:30pm to 5:00pm****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) State the objectives of Ginning and Bailing and explain any one type of Ginning machine in detail. **07**
(b) Explain the factors influencing degree of opening, cleaning and loss of fibres at Blowroom **07**
- Q.2** (a) What is Carding? Explain basic processes involved in Carding. Discuss the carding action with Transfer of fibres and Heel and Toe arrangement. **07**
(b) Explain briefly the basic components of Blowroom machine with setting points. **07**
- OR**
- (b) In which sequence are Blowroom machines arranged? Explain the working of any one machine of any one zone with a neat sketch. **07**
- Q.3** (a) Explain the concept of Mixing and Blending. **07**
(b) Write about how the manmade fibres are processed in Blowroom department. **07**
- OR**
- Q.3** (a) Explain the use of gravity traps, metal detectors and dust separators at Blowroom department. **07**
(b) Discuss the modern developments in Blowroom department. **07**
- Q.4** (a) Explain the features of High Production Card. **07**
(b) Write on the metallic card clothing parameters for Lickerin, Cylinder, Flats and Doffer. **07**
- OR**
- Q.4** (a) Write a short note on the Chute feed system. **07**
(b) State the card settings for cotton and polyester and discuss their effect on carding quality and waste generated. **07**
- Q.5** (a) Explain actual draft and mechanical draft. State the relationship between them. Also discuss the functions of moteknives and give arrangement with settings of moteknives **07**
(b) What is Tandom carding? State the advantages of Tandom carding. **07**
- OR**
- Q.5** (a) Write on the Roller doffing devices and Coiler systems used at Carding machine. **07**
(b) Discuss the latest developments at Carding machine. **07**
