

Paper Id:

164301

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B. TECH.
(SEM-III) THEORY EXAMINATION, 2019-20
YARN TECHNOLOGY-I

*Time: 3 Hours**Total Marks: 70***Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.** **2 x 7 = 14**

- a. What is role of doffer comb?
- b. What is the role of stop motions in draw frame?
- c. Give the Sequence of scutcher line?
- d. Define the process of Ginning?
- e. What do you mean by Bale?
- f. What is the objective of coiler mechanism?
- g. Define the term cotton harvesting?

SECTION B**2. Attempt any three of the following:** **7 x 3 = 21**

- a. Explain in details the ERM cleaner with suitable diagram.
- b. What do you mean by drafting? Explain different drafting system in modern draw frame.
- c. Carding is the heart of spinning. Justify your answer.
- d. Explain rotabar ginning process with a suitable diagram.
- e. Discuss in details the close loop and open loop auto leveler with suitable diagram.

SECTION C**3. Attempt any one part of the following:** **7 x 1 = 7**

- (a) In a blow room the production is 10000 lbs/ shift of 10 hour. Calculate the number of cards you will allocate with the given details if doffer speed = 20 rpm, efficiency = 90 %, sliver hank = 0.16, doffer diameter = 27 inch and waste = 1 %?
- (b) calculate the time taken for a card to exhaust a lap with following datas
Lap weight = 50 lbs, sliver hank = 0.18, efficiency = 85%, waste = 1%, doffer dia = 30 inch, and doffer rpm = 25.

4. Attempt any one part of the following: **7 x 1 = 7**

- (a) Explain the cleaning efficiency of blow room with suitable graph?
- (b) Explain the knocking-off mechanism for the control of lap weight?

5. Attempt any one part of the following: **7 x 1 = 7**

- (a) What is card clothing? Explain in suitable diagram?
- (b) Explain the carding action and stripping action with suitable diagram.

6. Attempt any one part of the following: **7 x 1 = 7**

- (a) Explain the migration of fiber in the drafting zone and drafting wave's roller slip.
- (b) How can you control the non-uniform production in the draw frame?

7. Attempt any one part of the following: **7 x 1 = 7**

- (a) Explain in details the Harvesting of cotton in Asia and Europe.
- (b) Discuss saw ginning and roller ginning with suitable diagram.