

B.TECH.
(SEM VI) THEORY EXAMINATION 2018-19
ADVANCE YARN MANUFACTURE

Time: 3 Hours**Total Marks: 100****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A**

- 1. Attempt all questions in brief.** **2 x 10 = 20**
- a. What are the properties of textured yarn?
 - b. How ring spun yarn is differ from friction spun yarn?
 - c. What is the role of air during air jet spinning?
 - d. What are the applications of rotor yarn?
 - e. Define friction spinning.
 - f. What do you mean by texturization?
 - g. What is twist less yarn?
 - h. What do you mean by self twist yarn?
 - i. What are the limitations of Ring spinning system?
 - j. What is Back Doubling?

SECTION B

- 2. Attempt any three of the following:** **10x3=30**
- a. State the reasons behind evolution of New spinning systems and explain the principle of rotor spinning.
 - b. Briefly discuss about the raw material requirement and preparation of feed material for the preparation of rotor yarn.
 - c. Compare the relative merits & demerits of DREF-2 & DREF-3 spinning systems.
 - d. State the principles of formation of yarn in Air jet spinning systems. Illustrate few examples about properties of Air jet spun yarn vis-a vis Ring frame spun yarn.
 - e. State the mechanism of twisting for the formation of Friction spun yarn. State the limitations of Friction spun yarn.

SECTION C

- 3. Attempt any one part of the following:** **10*1=10**
- a. Discuss the various factors which affect the properties of rotor yarn.
 - b. Discuss the process of production of multicolored yarn.
- 4. Attempt any one part of the following:** **10*1=10**
- a. With neat sketch explain the false twist texturization process.
 - b. Mention the applications of plyfil yarn with respect to their properties.
- 5. Attempt any one part of the following:** **10*1=10**
- a. Explain the solvent texturization process of wool.
 - b. Briefly discuss on assembly winding system.
- 6. Attempt any one part of the following:** **10*1=10**
- a. State the application of fancy yarn.
 - b. What do you mean by breaded yarn. Explain its manufacturing process.
- 7. Attempt any one part of the following:** **10*1=10**
- a. Explain the electrostatic spinning system.
 - b. What is the advantage of new spinning system over conventional spinning system.