

Paper Id: Roll No:

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

Time: 3 Hours

Total Marks: 100

Note: 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 is ginning process?
b.	What do you understand by trash?
c.	Why tint colors are used for synthetic fibers?
d.	What is fiber fineness and how the yarn count depends on it?
e.	What do you mean by cleaning efficiency in Blow-room?
f.	What is fiber blending? Give one example.
g.	What is nep and where it is generated?
h.	What do you understand by Contamination in the fibers?
i.	What is the function of piano feed system in blow-room line
j.	What is function of Kirschner beater in blow-room line?

SECTION B

2. Attempt any three of the following: 10x3=30

a.	What are the types of Ginning process? Describe working of Saw ginning machine.
b.	What do you understand by picking? Which picking method is popular in India and why?
c.	Explain the principle and working of Mixing Bale Opener.
d.	What is tinting colors? What should be the quality of good tinting colors?
e.	How various settings of grid bars depend on trash level and type of fibers? Explain with suitable examples.

SECTION C

3. Attempt any one part of the following: 10x1=10

a.	Explain the importance of Metal Extractor in a cotton blow room line. Describe briefly the working of Metal Extractor.
b.	What is the need of Bypass arrangement in a cotton blow room line? Explain the working of Bypass arrangement.

4. Attempt any one part of the following: 10x1=10

a.	Explain various types of fibers with suitable examples.
b.	Explain the principle and working of Mono Cylinder cleaner.

5. Attempt any one part of the following: 10x1=10

a.	Write steps in the form of flow chart for manufacturing of P/V and P/C combed yarn.
b.	Write the difference between trash and contamination. What are different systems/techniques followed in a mill to remove contaminants from cotton?

6. Attempt any one part of the following: 10x1=10

a.	If there is 1.2% trash in final lap and cleaning efficiency of blow room line is observed as 70%, calculate the trash present in the raw cotton.
b.	Explain briefly about the various defects in Blow-room laps.

7. Attempt any one part of the following: 10x1=10

a.	Explain the cause and effect of high level of Nep generation in blow room department.
b.	Describe lap formation in blow-room line with neat sketch.