

B.TECH. DEGREE EXAMINATIONS: NOVEMBER 2009

Third Semester

TEXTILE TECHNOLOGY

U07TT304: Yarn Manufacturing Technology I

Time: Three hours

Maximum Marks: 100

Answer ALL the Questions:-

PART A (10 x 1 = 10 Marks)

1. The object of the perfect ginning process is the removal of fibers from the _____
a) Seed b) Saw c) Roller d) Kapas
2. Ginned cotton is compressed into _____, which must then be covered to protect them from contamination during transportation and storage
a) Lap b) Bales c) Sliver d) Dyed
3. The main object of Scutcher is to convert the mass of cotton fibers into a uniform thick sheet and wound in the form of a _____.
a) Tuft b) Lap c) Micro dust d) Dust
4. In blow room pneumatic conveying of cotton material was done at air velocity is _____
a) 0.5m/sec b) 5m/sec c) 15m/sec d) 50m/sec
5. In high speed carding flats comprise _____ individual carding bars combined into a band moving on an endless path.
a) 32-40 b) 80-112 c) 50-66 d) 40-46
6. The total waste in high production carding is _____
a) 0.5 to 1% b) 10% to 15% c) 4.5% to 6.5% d) 15% to 25%
7. The task of the pressure bar used in high production draw frame is to control the
a) Short floating fibers b) Long floating fibers
c) Top roller pressure d) Total draft
8. Normally the font zone setting in short staple draw frame is _____
a) 80 mm b) 40mm c) 100mm d) 1000mm
9. Normally modern high speed comber runs at _____ nips/min.
a) 80 b) 40 c) 100 d) 400
10. The main task of comber is the elimination of _____
a) Seeds b) Good fibers c) Short fibers d) Micro dust

PART B (10 x 2 = 20 Marks)

11. Compare ROLLER and SAW ginning.
12. What is the object of drying processes in pre - ginning?

- 13 Define cleaning efficiency of the blow room
- 14 What is the object of Multi-Mixer or Aero-Mixer in blow room processes?
- 15 Why three licker in roller used in modern carding engine?
- 16 What is the normal range of cylinder and doffer speed in ultra modern carding?
- 17 What are the advantages of auto levelers?
- 18 What is Correction time in autolevellers draw frame?
- 19 What is the object of top comb?
- 20 What is fractionating efficiency in ultra modern high speed comber?

PART C (5 x 14 = 70 Marks)

21 a) Explain in detail with neat sketch the principle and setting to be used for effective ginning operation in roller type ginning machines.

(OR)

b) Explain in detail pre ginning operations and post ginning operations.

22 a) With the help of neat sketch explain the technological components of ERM cleaner.

(OR)

b) With the help of neat sketch explain the technological components of MONO CYLINDER cleaner.

23 a) With the help of neat sketch explain functions of close and open loop autolevellers used in any high speed carding engine.

(OR)

b) With the help of neat sketch explain hook theory and using conceptual diagrams explain the hooks removal process in the post carding operations.

24 a) What is open loop auto leveling? With the help of neat sketch explain the principle of open loop autolevellers used modern draw frame.

(OR)

b) With the help of neat sketch explain the principle of drafting system used any one modern draw frame.

25 a) With help of diagrams explain the passage of material in any cotton comber.

(OR)

b) Enumerate the types of lap preparation methods to achieve good combing efficiency.
