

**THIRD SEMESTER  
TEXTILE TECHNOLOGY  
SCHEME JULY 2008**

**INTRODUCTORY SPINNING (301)**

**Time : Three Hours**

**Maximum Marks : 100**

**Note :** Attempt total *six* questions. Question No.1 is compulsory. From the remaining questions attempt any *five*. Give sketch wherever necessary.

1. Choose the correct answer 2 each
  - i) The function of Piano feed Regulating motion is to:
    - (a) Adjust feed to the Crighton opener
    - (b) Control feed to the reserve box
    - (c) Used in Chute feed system
    - (d) Control feed to the Scutcher
  - ii) In a hopper bale breaker the stripping roller cleans the:
    - (a) Inclined lattice
    - (b) Leather flap beater
    - (c) Evener roller
    - (d) None of these

(2)

- iii) Conical laps are caused due to:
- (a) Too much fan speed
  - (b) The pressure on the lap spindle is not uniform
  - (c) The tension draft between sell roller and calendar roller is very high.
  - (d) None of the above
- iv) The Carding machine can:
- (a) Generate Neps
  - (b) Remove Neps
  - (c) Remove as well as generate Neps
  - (d) None of the above
- v) In a Carding machine Licker-In and doffer rotates in same direction:
- (a) True
  - (b) False
2. a) What are the object of Ginning? With the help of a neat sketch explain the working of Saw gin. 9
- b) What are the varieties of cotton? Name six important varieties of Indian cottons and mention their fibre length. 9
3. a) With a neat sketch explain the working of step cleaner. 9

(3)

- b) With the help of neat and labelled diagram describe the working of Mono cylinder cleaner. 9
4. a) What are the object of Carding? Sketch and explain the passage of material through Carding machine? 9
- b) Mention the salient feature of modern Carding machine. 9
5. a) A sample from 20<sup>th</sup> mixing from 10 bales have 8%. Trash content in cotton, the laps produced from this content in cotton the laps produced from this same mixing gave a trash content of 1.8%. Find the cleaning efficiency %. 8
- b) Calculate the production of a Scutcher for 8 hrs. If the 9" dia. Lap roller is making 7 rpm, the hank of each lap of the 4 laps fed is 0.00146. M.D in the machine is 3.8% waste removed 2.5% and efficiency is 91%. 10
6. a) The production of a Card per hour is 12 Lbs. There are 20 Card that are running to process similar type of material waste taken out at each card is 5%. The hank of the lap fed to the card is 0.0012, calculate at what speed? The 9" lap roller of a Scutcher should run with an efficiency of the machine being 90%. 10

(4)

- b) Give the maintenance schedule of carding machine. 8
7. a) What is Stripping and grinding of card wires? Discuss the various types of wire that are used in Licker-In cylinder and differ. 10
- b) Discuss the salient features of a modern blow room line. 8
8. Write short notes on any four of the following: 4½ each
- a) Factors affecting the cleaning efficiency of blow room.
  - b) Cross-Roll Verga
  - c) Heal and Toe
  - d) Auto mixer
  - e) Card setting
  - f) Hopper feeder

