THIRD SEMESTER
TEXTILE TECHNOLOGY
SCHEME JULY 2008
INTRODUCTORY SPINNING (301)

Time : Three Hours ***Maximum Marks : 100***

Note : Attempt total six questions. Question No.1 (Objective type) is compulsory. From the remaining questions attempt any five.

1. Write short answers of the following : 2 each

   a) Objects of evener roller in a hopper bale breaker.

   b) Functions of trumpet.

   c) Objects of mixing.

   d) Compare horse fall grinder and dead roller grinder.

   e) Functions of Doctor's knife.

2. a) With the help of a neat and labelled diagram describe the working of Kirschner beater. 9

b) What is ginning? Sketch and explain the working of Saw Gin. 9

3. a) What is Tandem Card? Sketch and explain the working of Tandem Card. 12

b) Mention the features of modern carding machine. 6

4. a) Sketch and explain the working of Auto Mixer. 9

b) With the help of a neat and labelled diagram explain the passage of material through a Monocylinder cleaner. 9

5. a) What is roller stripping and grinding? Explain with sketches. 9

b) What is doffing? Sketch and explain the working of Cross Roll Varga doffing device. 9

6. a) Find out the production of a card/shift of 8 hrs in pounds if the 27" diameter doffer makes 14 r.p.m. Hank delivered is 0.14 and efficiency is 90%. 10

b) If the hank of sliver is 0.12 and the actual draft is 104 of a carding machine then calculate the weight of one lap of 40 yds. 4

c) The lap fed to a carding machine has a mass/ metre of 500 gms. The linear density of card sliver is 4 kg tex. What is the draft in the card? 4

7. a) On a finisher scutcher 4 laps each of 140z/yd are fed. The lap delivered weighs 13.5 oz/yd. What is the resultant draft? If the waste removed is 2% then calculate the mechanical draft. 9

b) If 7500 lbs of cotton is processed in a spinning mill, 500lbs of waste is removed in blow room, 400lbs in the card room and 320lbs in the spinning room. What waste percentage is removed in each of the department. 9

8. Write short notes on any four : 4½ each

a) Card waste and its control.

b) Various types of cotton used in spinning.

c) Feed plate of a carding machine.

d) Flats

e) Arrangement of calendar rollers and their weighting in a blow room.