FIFTH SEMESTER
TEXTILE TECHNOLOGY
SCHEME JULY 2008
SPINNING TECHNOLOGY (503)

Time : Three Hours *Maximum Marks : 100*

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

1. Write short answers of the following : 2 each
   a) Function of spacer
   b) Object of false twister
   c) Function of buttons on plug type spindle
   d) Object of doubling
   e) Object of V.P.S drive

2. a) What are the objects of Ring Frame? Sketch and describe the passage of material through a modern Ring Frame. 12
   b) Give the maintenance schedule of R/F. 6

3. a) Sketch and explain SKF-PK-225 drafting system. How does it differ from SKF-PK-1600-40 drafting system. 12

   b) Sketch and explain the winding principle of flyer leading S/F. 6

4. a) What are the objects of differential motion of a S/F? Sketch and describe any type of differential notion that you know. 12

   b) Mention the salient features of modern S/F. 6

5. a) What is T.F.O? With a neat sketch describe the passage of material through a T.F.O. 9

   b) Sketch and explain a modern Ring Frame spindle and also explain the dampening device used in high speed spindle. 9

6. a) Find the full bobbin speed as well as the front roller speed of a bobbin leading S/F with the following details. 9

   Spindle speed=600 rpm, Full bobbin diameter=5½", Front roller diameter=1¼", T.P.I=0.8.

b) Find the production/shift of 8hrs in kg. of a R/F having 400 spindles, spinning 20^s count and working at 80% efficiency, if the spindle speed is 9000 rpm and T.M=4.3 9

7. a) With neat sketches explain how building motion of a speed frame regulates and reverse the traverse of bobbin rail. 12

b) A Ring Frame produces 60^s yarn from a moving of 3.0 hank. If the draft consent is 1200 and C.P is 58T then calculate the twist contraction percentage. 6

8. Write short notes on any four of the following: 4½ each

a) UT-630 drafting system

b) UTM-620-14 drafting system

c) Dual motor drive

d) Antiwedge ring and elliptical traveller

e) Features of automatic drafting device on a R/F