

SECTION-B

2. Draw the coil path of a cylindrical package with Traverse Ratio 2.5, length of traverse 10cm and circumference of package 12cm.
3. Mention the working principle of T.F.O. along with its advantages.
4. Mention the testing and yarn conditioning parameters of USTER Classimat- III.
5. Show that the winding speed remains constant in case of a drum driven cheese.
6. Show mathematically that sley reciprocation does not follow the SHM.

SECTION-C

7. a. A mill manufactures in large quantity warper beams containing 300 kg. and 400 ends of 400 tex yarn. On an average there are 40 breaks/beam, each taking 1.2 min. to repair and doffing time per beam is 6 min. The warping speed is 550 meters/ min. If a magazine creel is in use, determine
 - i. The running efficiency
 - ii. The average production in kg per hour.
- b. Three yarns- 28^s , 30^s & 32^s are twisted together. The resultant yarn weighs 137 lbs. Find the resultant count and weight of each yarn. 6+4
8. a. Describe a parallel picking mechanism with a neat sketch. 6
- b. Establish the relationship between ppm, velocity of shuttle, degrees of crank rotation, length of shuttle and reed width & also establish the equation of power for picking. 4
9. a. Describe the working principle of a Five Cylinder sizing machine. 5
- b. Write a brief about two non-conventional sizing techniques. 5

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.