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B. Tech 3rd Semester Examination

Fabric Manufacturing-I (N.S.)

TE-214

Time : 3 Hours **Max. Marks : 100**

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five questions in all, select one question from each sections A, B, C and D. Section E is compulsory.

SECTION - A

1. (a) Describe Autocover winding machine with passage of yarn and write their salient features. **(10)**

   (b) Explain Automatic doffing and thread stop motion used in Hacoba pirn winding m/c. **(10)**

2. (a) Describe yarn classify system. What type of faults generally eliminated in different winding m/c with suitable example? **(10)**

   (b) Explain various type of yarn clearers and write its selling with neat sketch. **(10)**

SECTION - B

3. (a) Differentiate between Beam warping machine and sectional warping machine. **(6)**

   (b) Explain Beam warping machine. Also calculate No. of threads in a beam to be taken in 60's reed of 72" width of fabrics to be prepare and take another own datas. **(14)**

4. (a) With suitable sketch describe conventional size box. **(10)**

   (b) Write the object of sizing machine. Explain multi cylinder sizing m/c with neat sketch. **(10)**

SECTION - C

5. (a) How modern drawing in process can be done now a time? Explain it. **(10)**

   (b) Classify different kind of looms with utility of each loom. **(10)**

6. (a) Write the salient feature of tappet. Draw the passage of yarn to fabric when tappet is fatted. **(10)**

   (b) How plain tappet constructed? Calculate lift of tappet by taking own datas. **(10)**

SECTION - D

7. (a) Why underpick mechanism is more popular nowadays? Explain under pick mechanism with their timing and setting. **(12)**

   (b) Calculate shuttle speed of 72" width loom while loom running speed of 140 R.P.M. **(8)**

8. (a) Write 3 reasons (important) of each shuttle fly, shuttle smash and shuttle trap and how it can be corrected on loom. **(10)**

   (b) Explain Beating up mechanism with suitable example. **(10)**

SECTION - E

9. (a) Write factors by which cone can be uniformly built.

   (b) Write short notes on additive type yarn tensioner.

(c) Write about multiplicative type tensioners.

(d) What is reed count and heald count? Also write about different type reed used in weaving.

(e) Draw only sketch of over pick mechanism with spare names.

(f) Write duties of worker used in sectional warping m/c.

(g) Write about of modern sizing box.

(h) Write salient feature of automatic loom using shuttles.

(i) Calculate efficiency of loom when production of loom 100 mts. and 40 picks quality to be woven.

(j) Calculate Eccentricity of sley while taking crank arm length 12" and crank length 3". **(10×2=10)**