

B. Tech 7th Semester Examination

Post Spinning Operation (NS)

TE-415

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 selecting one question from each of section A, B, C and D. Section E is compulsory.

SECTION - A

1. Explain different kind of spinning process. How stress and strain act at different places also explain drawing by through neck process with suitable figure. (20)
2. How drawing behavior of thermoplastic polymer take place, justify with parameters on structure and properties of fibres with different stages and suitable figure. (20)

SECTION - B

3. Why we go for heat setting for different kind of fibres and filament. Write their object method and how heat setting effects properties of fibres. (20)
4. Explain what is the need of tow to top conversion. Also write different tow to top conversion with taking suitable example of fibres or filament. (20)

SECTION - C

5. Write the properties of bulk yarn with producing method. Explain working principle of knife edge cramping process with suitable figure. (20)

6. At what stage major problems developed during friction, lavishing, how it can be solved. (20)

SECTION - D

7. Write the concept of air jet texturing. What type of material and process involved in. Explain with suitable example. (20)
8. What type of developments take place in texturing and explain air entanglement process. Justify with suitable example. (20)

SECTION - E

9. Write in short of each answer.
 - (a) What is high speed spinning, write with suitable example?
 - (b) Write about of drawing of pre oriented yarn.
 - (c) What is basic need of post spinning operation?
 - (d) Why yarn over feed effects on over all dia of air textured yarn.
 - (e) How much temperature used in drawing of nylon fibres.
 - (f) Write about term degree of set for heat.
 - (g) How stress and strain curve effect in textured yarn. Justify your answer with example.
 - (h) Write about chemical texturing.
 - (i) Write short notes on draw warping m/c.
 - (j) What is high spot it effects in textured yarn? (2×10=20)