[Total No. of Questions - 9] [Total No. of Printed Pages - 2]
(2126)

16057(D) - 0 DEC 2016

B. Tech 3rd Semester Examination

Yarn Manufacture-I (NS)

TE-213

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 any five questions in all, selecting one question from each sections A, B, C and D. Section E is compulsory.

SECTION - A

1. (a) What are different types of blending techniques? What are advantages & disadvantages of different blending techniques? (10)

   (b) With the help of diagram explain working principle of modern blending machine. (10)

2. What are differences between cotton and synthetic blow room line? Prepare a sequence of machine for the processing of medium grade cotton with suitable diagram. (20)

SECTION - B

3. Justify degree of cleaning is not better than degree of opening. How will you measure degree of opening? What are the factors on which degree of opening depends? (20)

4. Write short notes on:

   (a) Double chute feed (b) Lapdefects site prevention. (20)

SECTION - C

5. What are principles of carding? State with relevant equation. Explain heel and toe arrangement with suitable diagram. (20)

6. Explain fibre transfer ratio in the card. Derive equation for fibre transfer ratio. What are the factors on which fibre transfer ratio depends? (20)

SECTION - D

7. State objective of draw frame. Explain the functions of important parts of the draw frame. (20)

8. Why autolevelling is important in the modern draw frame? Explain the working principle of open loop autoleveller with suitable diagram. (20)

SECTION - E

9. (i) State objectives of carding machine.

   (ii) Explain roller slip.

   (iii) State Ginning & its importance.

   (iv) State the importance of metallic clothing.

   (v) Explain roller eccentricity.

   (vi) Explain break draft and its importance in draw frame.

   (vii) Why tap roller weighing is done in draw frame?

   (viii) State important feature of modern carding machine.

   (ix) State objectives of blow room.

   (x) What is the effect of doubling on sliver quality? Explain.
   (2×10=20)