Printed Pages : 3

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NTT-401

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 160401

Roll No. | | | | | | | | | | |

B. Tech.

(Sem. IV) Examination, 2014-15

Yarn Manufacture-II (NTT-401)

Time : 3 Hours] *[Total Marks : 100*

Note: Attempt ***all*** questions. All questions carry ***equal*** marks.

1. Attempt any ***two*** parts of the following.

   a) Discuss the objects of carding and how they are achieved.

   b) Discuss the role of feed plate, feed roller and mote knives and its constructional details.

   c) Discuss the role of back plate, front plate, and cylinder under casing and their settings in carding

2. Attempt any ***one*** parts of the following

   a) Differentiate between the doffer and the cylinder.

   b) Discuss the technological design changes in carding

3. Attempt any ***two*** parts of the following.

   a) Discuss the object and working of flat stripping comb and doffer comb.

   b) Discuss the changes required in card setting for long and short staple fibre.

   c) The production of a card per hour is 12 lbs. There are 20 cards that are running to produce similar type of material. Waste taken out at each card is 5%. The hank of the lap feed to the card is 0.0012. Calculate at what speed of 9" lap roller of a scutcher should run with an efficiency of the machine being 90%.

4. Attempt any ***two*** parts of the following.

   a) Discuss the mechanism responsible for the constant hank of card sliver.

   b) Discuss the working principle of draw frame and passage of cotton through draw frame showing important parts.

   c) Discuss the merits and demerits of different drafting systems used in draw frame.

5. Attempt any ***one*** parts of the following.

   a) Define the importance of doubling in the draw frame.

   b) A draw frame has front roller running at 1400 rpm and has 2" dia. The tension draft between Front roller and coiler calleder roller is 1.02. Calculate production at 80% efficiency when hank delivered is 0.15

   c) Discuss the recent developments in draw frame.

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