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**RN-6301**

**B. E. II (Sem. III) (T.T.) Examination**

**May / June - 2010**

**Yarn Manufacturing - I**

Time : 3 Hours]

[Total Marks : 100

**Instruction :**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<b>B. E. 2 (Sem. 3) (T.T.)</b>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<b>Yarn Manufacturing - 1</b>	<input type="text"/>
Subject Code No. : <input type="text"/> 6 <input type="text"/> 3 <input type="text"/> 0 <input type="text"/> 1	Section No. (1, 2,.....) : <input type="text"/> 1&2
	Student's Signature

- (2) Answers to the **two** sections must be written in **separate** answer books.
- (3) Figures to the **right** indicate full marks.
- (4) Tie **two** sections **separately**.

**SECTION - I**

**Q1.[a] Answer the following :**

1. State the objects of Blow room. [2]
2. Explain the term Blending with example. Why blending is carried out? [2]
3. What is Trash? What it is composed of? [2]
4. What is the weight of standard India cotton Bale ? [1]
5. Which mechanism controls the evenness of Lap in Blow room? [1]
6. For Manmade fibres , more number of cleaning points should be used. True or false. [1]
7. What is the function of Calender rollers in Blow room? [1]

**Q1. [b] With a neat sketch , describe the construction & working of Knife roller Gin. [10]**

**Q2 Explain the construction & working of following machines briefly with suitable sketch: [15]**

1. ERM cleaner
2. Step cylinder cleaner
3. Hopper Bale opener

**OR**

**Q2.[a] Describe the important stages of Automatic Lap doffing with neat sketch. [12]**

**[b] Calculate Production of Blow room in terms of Kgs/ Shift / Scutcher, if the delivery speed is 100inch/min , hank of lap is 0.0014 and efficiency is 80%. [3]**

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**1**

**[Contd...**

- Q3** Write Short Notes [ **ANY THREE** ] [15]
- 1 Karousal Bale opener
  - 2 Advantages of Automatic Bale Opener
  - 3 Multimixer
  - 4 Ancillary equipments used in Blow room.

**SECTION - II**

- Q4.[a] Do as directed:**
1. In the high production card metallic clothings are used. (State true/false). [1]
  2. Sweep gauge is used for setting of licker-in and licker-in undercasing. (State true/false). [1]
  3. When two high production card units are joined , it is called as \_\_\_\_\_ card. [1]
  4. Find out Draft on carding machine if lap hank is 0.0015 and sliver hank is 0.15. [2]
- [b]** Explain advantages and disadvantages of chute feed system over lap feed system. [06]
- [b]** What is autoleveller? Explain open loop principle of autoleveller. [05]
- [c]** Discuss in detail objects of carding machine. [04]
- Q5 .[a]** Derive a formula to find out intensity of card assuming suitable data. [08]
- [b]** Explain dustless stripping with neat sketch. [07]
- OR**
- Q5 [a]** Explain with neat sketch any grinding instrument used for grinding operation on carding machine. [07]
- [b]** Describe **any two** developments in card web doffing system with neat sketches. [08]
- Q6** Write Short Notes [ **ANY THREE** ] [15]
1. Web defects and remedies
  2. Features of high production card
  3. Metallic card clothing
  4. Importance of card setting and factors affecting it.