THE TEXTILE ASSOCIATION (INDIA)  
G.M.T.A.(REVISED) EXAMINATION –2017  
SECTION-B PAPER- B1  
YARN MANUFACTURE  

Date: 23.12.2017  
Marks: 100  
Time: 2.00 pm to 5.00 pm  

Instructions:  
1. Attempt six questions out of which Q.1 is compulsory  
2. Answer each main question on new page  
3. Figures to the right indicate full marks  
4. Illustrate your answers with sketches and flow-charts wherever necessary  
5. Use of non-programmable electronic calculator permissible  
6. Mobile and any other communication devices are not allowed in exam hall  
7. Assume suitable data wherever necessary.  

Q1.  
a. Define the following terms:  
   i. Opening and Cleaning.  
   ii. Neps and Noil.  
   iii. Blending and Mixing.  
   iv. Mechanical draft and Tension draft.  
   v. Draft and Draft constant.  
b. Answer the following questions  
   i. Define Ginning. Explain Knife roller gin with neat labelled diagram.  
   ii. What are the objectives of blow room? Explain the factors influence in cleaning of blow room.  

Q2.  
a. Describe with neat labelled diagram of feeding and opening zone of Trutzscher DK60 machine.  
b. Explain the following:  
   i. Lap feeding ii. Flock feeding in carding zone.  

Q3.  
a. Explain the objectives and working procedure of draw frame with neat labelled sketch.  
b. Discuss the different types of Auto-leveler in draw frame.  

Q4.  
a. What do you understand about combing cycle. What are the objectives of combing  
b. What do you mean by fractional efficiency of comber?  

Q5.  
a. Explain the working procedure of 4/4 drafting system in speed frame with neat label sketch.  
b. Discuss the roving tension of speed frame.  

Q6.  
a. Explain with neat sketch working principle of ring spinning and objectives.  
b. Explain the advantages and functions of ring spinning.  

Q7.  
a. Explain the following:  
   i. Yarn Faults and Clearing in winding ii. Electronic Yarn Clearers  
b. Explain with neat labelled diagram of cone winding machine.  
   With short notes on the following: (neat labelled diagram)  
   i. Open end spinning system ii. Two for one twisting machines  
   iii. Grading of cotton iv. Traveller  

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