

THE TEXTILE ASSOCIATION (INDIA)

G.M.T.A. EXAMINATION-2020

SECTION D- D1

SHORT STAPLE YARN MANUFACTURING.

Date: 24.12.2020

Marks: 100

Time: 2 pm to 5 pm

Instructions:

1. Attempt **SIX** questions out of which **Q1** is Compulsory
2. Answer each next question on new page.
3. Figures to the right indicate full marks.
4. Illustrate your answers with sketches and flow chart wherever necessary.
5. Use of nonprogrammable electronic pocket calculator permissible.
6. Mobile and any other communication devices are not allowed in the exam hall.
7. Assume suitable data wherever necessary.

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| Q1 a. | Define or explain the following terms: | 10 |
| | i. Synthetic fibres ii. Cut staple iii. Man-Made fibres. | |
| | iv. Staple fibre v. Natural fibres. | |
| b. | What are the necessity of the application of anti-static agents and tinting colours while processing textile fibres? | 10 |
| Q2. | Describe the detail process of blending at blow room and drawframe. Give the advantages and disadvantages of the same. | 16 |
| Q3. | Explain briefly processing concept of 75/35 cotton/viscose blends in cotton yarns. Give the technical details viz., Speeds and setting parameters etc. | 16 |
| Q4. | What is the modification needed in processing 100% polyester on cotton system? | 16 |
| Q5. | Why synthetic roller cots require special treatment? Describe the detail the various methods adopted for treating roller cots | 16 |
| Q6. | How do we control the humidity and temperature is important parameters in processing Man-Made fibres? How it is done in a spinning-mills? Give standards of maintaining temperature and humidity at processing 100% cotton and 100% polyester. | 16 |
| Q7. | What is the difference between single and double roving feed at ring frame? Give its merits and demerits. | 16 |
| Q8. | Write a short note on the following: | 16 |
| | i. Card clothing ii. Aprons and cots iii. Lappets and condensers. iv. Different coiling methods used in Drawframe. | |
