

THE TEXTILE ASSOCIATION (INDIA)

G.M.T.A. EXAMINATION-2020

SECTION D- D2

LONG STAPLE AND OTHER SPUN YARN MFG.

Date: 25.12.2020

Marks: 100

Time: 2pm 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: | 12 |
| | i. Lignin | |
| | ii. Crimp | |
| | iii. Clipped wool | |
| | iv. Cots wool | |
| | v. Linen | |
| | vi. Sericin | |
| b. | Define wool numbering. Discuss the opening and cleaning of raw wool processing | 08 |
| Q2. | Explain the detail concept of worsted, semi-worsted and woolen systems. | 16 |
| Q3. a. | Explain the working operation with neat labelled diagram of Tow and Top converters in worsted system. | 08 |
| b. | What is meant by contamination in wool? | 08 |
| Q4. a. | What so you mean by gilling? State their objectives. | 04 |
| b. | Where and how gilling is used? | 06 |
| Q5. a. | What are the objectives of wool combing? | 04 |
| b. | Explain with neat labelled diagram working procedure of wool combing machine | 12 |
| Q6. a. | Explain in briefly the theory of long fibre drafting. | 06 |
| b. | Discuss the operation details of flax drawing and roving production. | 10 |
| Q7. a. | Give the classification of Jute fibre | 06 |
| b. | Explain the working principle with neat labelled diagram of conversion raw jute fibre to yarn. | 10 |
| Q8. | Write a short note on the following (neat labelled diagram) | 16 |
| | i. Friction spinning | |
| | ii. Cap spinning | |
| | iii. Rotor spinning | |
| | iv. Condenser Card | |
