

THE TEXTILE ASSOCIATION (INDIA)
GMTA EXAMINATION - 2020
SECTION – E PAPER:E.1
INDUSTRIAL ENGINEERING AND MILL MANAGEMENT
Marks: 100

Date: 27.12.2020

Time: 10.00 am to 1.00 pm

Instructions:

1. Attempt any **six** questions out of which **Q. 1 is compulsory**.
 2. Answer each next question on new page.
 3. Figures to the right in the bracket indicate full marks.
 4. Illustrate your answer with sketches and flow charts wherever necessary.
 5. Use of non-programmable electronic pocket calculator is permissible.
 6. Mobile and any other communication devices are not allowed in the examination hall.
 7. Assume suitable data wherever necessary.
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| Q1 | Write Short Notes on any five of the following | 20 |
| | a. Industrial Engineering for optimizing production. | |
| | b. Value adding and cost adding elements in an industry. | |
| | c. Factors influencing the humidification plant in a spinning unit. | |
| | d. Competency levels required for the job of a supervisor. | |
| | e. Sustainability study for modernizing a production unit. | |
| | f. Structure of costs in a labour oriented factory. | |
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| Q2 | a What data are needed for working out costing in a wet processing operation? | 8 |
| | b How steam consumption can be reduced in wet processing operation? | 8 |
| | | |
| Q3 | a How do you work out the workloads of a winder in manual winding machine? | 8 |
| | b What are the factors responsible for loss in the winding efficiency in an automatic winding machine? | 8 |
| | | |
| Q4 | a What is Material Management? How it influences the performance and profitability in a Textile Mill? | 8 |
| | b How Material Handling influences quality, productivity and costs? | 8 |
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| Q5 | a What is Techno-economic analysis? How it differs from Sustainability study? | 8 |
| | b What are essential components of a Financial Balance sheet? | 8 |
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| Q6 | a Explain the applicable factory laws while designing a factory building for production. | 8 |
| | b Explain salient features of Provident Fund Act. | 8 |
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| Q7 | a Explain the approaches in costing for a wet processing unit. | 8 |

- b What is the difference between Activity Based Costing and Standard Costing? 8
- Q8 a Explain the need for maintaining the Relative Humidity in a textile mill. 8
- b What steps do you suggest to reduce the cost of humidification in a weaving mill? 8

