

17692

11920

3 Hours / 100 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question in a new page.
(3) Illustrate your answers with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) Assume suitable data, if necessary.

Marks

- 1. Answer any FIVE of the following: 20**
- Differentiate between product layout and process layout.
 - Which are the various devices and tools used to improve plant layout.
 - Explain steps involved in planing a layout.
 - What are the objects of material handling? Which are the factors to be considered while selecting material handling equipment for weaving.
 - Explain quality particulars EPI, PPI, Warp count, Weft count and cover factor.
 - Explain importance of temperature and humidity control in weaving department especially in winter season.
 - Suggest measures to reduce air, water and noise pollution in a textile unit.
 - Give power requirement of spinning department.

P.T.O.

- 2. Answer any TWO of the following: 16**
- a) Explain various factors to be considered while selecting the site.
 - b) Explain various principles involved in material handling. Explain with neat figure any three material handling equipment used in textile industry.
 - c) Give labour compliment for three shifts for a spinning mill having 20,000 spindles.
- 3. Answer any TWO of the following: 16**
- a) Write processing parameters in table form for 20^s carded yarn having 25000 spindles.
 - b) Calculate machinery required for producing 20^s carded yarn on 10,000 spindle.
 - c) Sketch a layout of 24 Ring frame m/c. with m/c details.
- 4. Answer any TWO of the following: 16**
- a) Calculate machinery required for producing 10,000 meters of voile fabric.
 - b) Sketch layout for entire weaving department for producing 10,000 meter of voile fabric.(Only loom shed)
 - c) Give labour compliment for producing 10,000 meters of voile fabric / day in three shifts having Ruti-C 100ms.
- 5. Answer any TWO of the following: 16**
- a) With neat figure explain construction and working of three types of humidifier used in weaving mill.
 - b) Suggest control measures to reduce Industrial accidents and Hazzards in textile mills.
 - c) What is energy conservation? Explain measures taken for energy conservation in spinning mill.

6. Answer any TWO of the following:**16**

- a) Which one the factors to be considered while selecting weaving machinery in weaving department. Explain with example.
 - b) Explain effect of various processing parameters for producing various carded and combed yarn.
 - c)
 - (i) What is importance of Energy audit? How energy audit is helpful to improve profitability of a textile mill.
 - (ii) Define relative humidity. How does humidity helps to improve productivity in weaving mill.
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