

22676

22223

3 Hours / 70 Marks

Seat No.

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- Instructions* –
- (1) All Questions are *Compulsory*.
 - (2) Answer each next main Question on 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.
 - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following: **10****
- a) List the fibre properties tested on AFIS.
 - b) Define Key variables.
 - c) List the ring yarn faults.
 - d) Define indices of productivity.
 - e) Explain labour employment ratio.
 - f) List the rotor yarn and package defects.
 - g) Explain the concept of machinery audit.

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- 2. Attempt any THREE of the following: 12**
- a) Explain role and scope of process control in spinning with chart.
 - b) Describe the procedure for measurement of cleaning efficiency of blowroom.
 - c) Explain index of irregularity.
 - d) Explain steps for measurement and control of the productivity in spinning.
- 3. Attempt any THREE of the following: 12**
- a) Describe procedure for controlling the combre waste.
 - b) Explain the factor affecting the yarn strength.
 - c) Suggest the renovation done at ring frame to reduce end breaks.
 - d) Explain methods for controlling C.V. % of rotor yarn lea count.
- 4. Attempt any THREE of the following: 12**
- a) Explain FQI and its importance in mixing.
 - b) Explain how cost quality index is computed and state its importance.
 - c) Explain the measures to be taken to control silver regularity at draw frame.
 - d) Explain causes and remedies for any two yarn faults.
 - e) Explain the scope of energy conservation in the spinning mill.
- 5. Attempt any TWO of the following: 12**
- a) Explain the factors affecting within and between bobbin count variation.
 - b) Explain the methods to control yarn strength variation in rotor yarn.
 - c) Suggest the check list for machinery audit in spinning mill for blowroom and carding department with respect to observation and corrective action.

6. Attempt any TWO of the following:**12**

- a) Explain the concept of yarn realisation. Give the chart for recording account for the same.
 - b) Describe importance of fractionating efficiency at comber. Explain how it is calculated.
 - c) Calculate cleaning efficiency of blowroom and carding department for 30^s mixing. Bale cotton containing 5% trash output of blowroom containing 2.75% trash and carded silver containing 0.275% trash.
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