## 22676

	242: 3 H	5 [ours / 70 Marks Seat No.
	Instru	actions – (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) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.
		Mark
1.		Attempt any FIVE of the following:
	a)	Define Fibre Quality Index (FQI).
	b)	List fibre parameters tested in HVI.
	c)	Define Nep Count.
	d)	State norms for rotor yarn U % for good quality.
	e)	Define key variable.
	f)	State the application of Productivity Index.

g) State the function of spectrogram.

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2.		Attempt any THREE of the following:	12
	a)	Explain the causes of idle spindles in rotor spinning. Also give the remedies.	
	b)	Describe the steps to control lea count variations and yarn U % in rotor spinning.	
	c)	Explain causes and remedies for nep generation in carding.	
	d)	Discuss the mean to improve productivity in spinning.	
3.		Attempt any THREE of the following:	12
	a)	State the causes and remedies of blow room lap rejection.	
	b)	Explain the application of linear programming in controlling cost and quality of mixing.	
	c)	Describe with neat sketch AFIs nep tester.	
	d)	Explain why sliver uniformity can precisely be controlled only at draw frames and not at any other machines.	
4.		Attempt any THREE of the following:	12
	a)	Differentiate between within and between bobbin count variation in ringframe.	
	b)	Explain the factors affecting ring spun yarn strength.	
	c)	State the factors affecting fractionating efficiency of camber.	
	d)	Explain remedial steps to control cleaning efficiency at blowroom. State the norms for cleaning efficiency at blowroom.	
	e)	List two main types of waste and describe measures to control them at card.	

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5.		Attempt any TWO of the following:	12
	a)	Explain determination of trash content and cleaning efficiency at carding machine.	
	b)	State the causes and remedies of endbreakages in rotor spinning.	
	c)	Define indices of productivity and means for increasing machine productivity in preparatory section.	

## 6. Attempt any <u>TWO</u> of the following:

**12** 

- a) Define machinery Audit. State the importance of machinery audit.
- b) Define energy conservation. Give the energy conservation in spinning department.
- c) State causes of high variation in yarn strength. Explain measures to control it.