Seat No.:	Enrolment No.

Subject Code:2143903

GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-IV (New) EXAMINATION - WINTER 2015

Date:30/12/2015

Tiı	ne: () truction 1.	Attempt all questions.Make suitable assumptions wherever necessary.	ks: 70
Q.1	(a) (b)	Give difference between GMR and CMR in memory devices. Write down different applications of Nano magnetism.	07 07
Q.2	(a) (b)	What is Piezoelectricity and Ferroelectricity? Write down short note on Magnetic Bubble Memory. OR	07 07
	(b)	Write down short note on GMR devices.	07
Q.3	(a) (b)	What is Yielding and Explain Time Depending Deformation? Write a short note on Ferromagnetism with necessary applications. OR	07 07
Q.3	(a) (b)	Explain True stress and True strain in material. Write a short note on Thermal conductivity and explain its application.	07 07
Q.4	(a) (b)	What is thermal shock in material and explain its remedies. Explain role of composition and structure in material. OR	07 07
Q.4	(a) (b)	Explain Photoluminescence and Photoconductivity. Write a short note on Colossal Magneto Resistance with its applications.	07 07
Q.5	(a) (b)	Explain Diamagnetism and Ferrimagnetism with applications. Write a short note on polymer based OLED. OR	07 07
Q.5	(a)	Write a short note on conductivity in nanoscale devices.	07
	(b)	What is difference between Ionic Conductivity and Metallic Conductivity?	07
