Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME-SEMESTER II • EXAMINATION – SUMMER 2017

Subject Code: 2723113 Subject Name: Introduction To Biomedical Engineering			Date:31/05/2017	
Tiı	ne:0: tructio 1. 2.	2:30 PM to 05:00 PM Ons: Attempt all questions.	70	
Q.1	(a) (b)	Draw and explain the Cell and its structure in brief. Explain with diagram the structures of nervous system in human body.	07 07	
Q.2	(a) (b)	Explain basic components of Biomedical Systems. Draw and explain the Cardiovascular system in human body. OR	07 07	
	(b)	Draw and explain the Respiratory system in human body.	07	
Q.3	(a) (b)	Explain with example the Piezo-electric transducers. Explain with circuit diagram the differential amplifier. OR	07 07	
Q.3	(a) (b)	Explain with example the ultrasonic transducer. Explain with circuit diagram the Isolation amplifier.	07 07	
Q.4	(a) (b)	Draw and explain the ECG Lead systems and recording methods. In which type of patient condition pacemaker is used? Explain working of synchronous type pacemaker. OR	07 07	
Q.4	(a) (b)	Draw and explain the EEG Lead systems and recording methods Write a tecnical note on all components of Audiometers.	07 07	
Q.5	(a)	Enlist the methods for Measurement of blood pressure. Explain any one from them in brief.	07	
	(b)	Enlist the methods for Nerve and muscle stimulators. Explain any one from them in brief.	07	
Q.5	(a)	OR What is the need of telemetry system in biomedical field? Explain types of biotelemetry systems.	07	
	(b)	Write a technical note on spirometer.	07	
