Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION - WINTER 2013

•		ect Code: 160301 Date: 27-11-2013	
•	e: 02	Name: Diagnostic Instrumentation 2:30 pm to 05:00 pm Total Marks: 70	
	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Give the block diagram description of Electroencephalograph. Explain Block diagram of ECG machine and Draw right leg drive circuit.	07 07
Q.2	(a) (b)	Write a short note on Tonometer. Explain ultrasonic blood flow meter. OR	07 07
	(b)	Explain construction and working principle of Electromagnetic Blood flow meter.	07
Q.3	(a)	 Bronchoscopy Laparoscopy Cystoscopy 	08
	(b)	4. cholecptography Explain Pure tone Audiometer and Speech audiometer. OR	06
Q.3	(a)	Explain block diagram of single channel telemetry system and Give clinical significance of Biotelemetry.	08
	(b)	What is spirometer? Explain Basic spirometer.	06
Q.4	(a) (b)	Explain Diseases related to Kidney and Urinary system and their diagnosis. Explain Oscillometric blood pressure measurement technique. OR	07 07
Q.4 Q.4	(a) (b)	Write a short note on Fluoroscopy and Image Intensifier. Explain measurement principles of MRI and PET SCAN.	08 06
Q.5	(a) (b)	Explain any method of monitoring Foetal Heart rate. Explain cardiovascular diagnosis techniques Trade mill and Holter monitoring. OR	07 07
Q.5	(a) (b)	Give brief introduction about barium meal studies and capsule Endoscopy. Explain various Auditory disorders and Diagnosis.	07 07
