GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION - SUMMER • 2015

Subject code: 160303 Date:08/05/2		15	
Subject Name: Therapeutic Instrumentation Time: 10 30AM-01 00BM Total Marks: 70			
` ′		07 07	
	demerits.		
(a)	What are the types of dialyzers? Explain the performance analysis of dialyzer.	07	
(b)	Write a short note on 'Portable kidney machine'. OR	07	
(b)	Explain types of stents and their applications.	07	
(a)		07	
(b)	Explain surgical diathermy analyzers.	07	
(a)		07	
` ′		07	
(a)	Explain the working principle of microwave diathermy and discuss the essential parts of microwave diathermy unit.	07	
(b)	Discuss principle, working and applications of ultrasonic therapy unit. OR	07	
` ′		07 07	
(a)	Explain delivery system and humidification in anesthesia machine	07	
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OR			
		07 07	
	ect I 10.3 ruct 1. 2. 3. (a) (b) (b) (b) (b) (b) (c) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	act Name: Therapeutic Instrumentation 10.30AM-01.00PM Total Marks: cuctions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. (a) Explain the need and working of pacer-cardioverter-defibrillator. (b) Explain the architecture of implantable defibrillator. Discuss its merits and demerits. (a) What are the types of dialyzers? Explain the performance analysis of dialyzer. (b) Write a short note on 'Portable kidney machine'. OR (b) Explain types of stents and their applications. (a) Discuss the types of electro-surgery techniques commonly employed in practice and types of wave forms generated by surgical diathermy machine. (b) Explain surgical diathermy analyzers. OR (a) List the types of LASERs and explain any one solid-state LASER. (b) Discuss the working principles and applications of CO ₂ LASER system (a) Explain the working principle of microwave diathermy and discuss the essential parts of microwave diathermy unit. OR (a) Explain the apnoea monitoring system with block diagram. (b) What are the types of incubators? Explain any one in detail. (a) Explain delivery system and humidification in anesthesia machine. OR (b) Discuss the classifications of heart lung machine.	
