C. E.

Duration -3 hrs

College of Engineering, Pune END SEMESTER EXAM 2012-13

Year (Final B.Tech)

(IE 418)- (Clinical Engineering)

Max. Marks-50

Date:- 29 th April 2013		Time:- 2.00 PM to 5.00 PM	
2. Number	s: tions are compulsory given at right indicates marks. rogrammable calculator is not allowed.		
Q. 1 A.	 Type- Differential Pressure Interface with computer Handheld Capable of continually measuring air flow 		10
В.	at least 15 seconds Explain the physiology of respiration.		5
Q. 2 A.	Explain the structure and RBC/WBC counting on Neubauer's Slide. What is the micro-scop	ing focusing for RBC, WBC	8
В.	and slide preparation? Can you automate thi Dried sample of electrophoresis need to exam of serum proteins. Suggest a suitable design designed system components.	nine for quantitative analysis	7
Q. 3	Solve any four		20
A.	Define repetition time and echo time in MRI. and T2 weighting mode for repetition time ar		
В.	Discuss in detail physiological effects of elec		
C.	What is prosthesis? List the considerations we What are the problems faced using prosthesis	hile choosing prosthesis.	
D.	Discuss Nuclear Medical Imaging.		
E.	State the physics of thermography imaging. I	list its diagnostic	

applications with advantages.

F. Write a short note on transdermal drug delivery system.