

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2025

Sixth Semester

Biomedical Engineering

CBM368- Therapeutic Equipment

Regulations - 2021

Duration: 3 Hrs

Maximum: 100 Marks

PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

Q.No	Questions	BLT	CO	Marks
1.	Why cardiac ablation procedure is done?	L1	1	2
2.	What is meant by Negative Pressure Ventilation?	L2	1	2
3.	What is a peripheral nerve stimulator used for?	L1	2	2
4.	What can you say about Lumbar Traction?	L2	2	2
5.	What are all the reasons for premature ageing?	L1	3	2
6.	Give the purpose of Deep Heat Therapy.	L2	3	2
7.	What is a gear driven dental handpiece?	L1	4	2
8.	What can you say about venture effect?	L2	4	2
9.	Distinguish between spontaneous and stimulated emission?	L2	5	2
10.	What is the use of nitrogen and Helium in CO2 laser?	L1	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11.	a i Write a brief note on cardiac ablation catheter technique.	L1	1	8
	i Discuss the types of cardiac pacemakers.	L2	1	8
	i			
	Or			
	b i Describe in detail the different mechanical modes of operation of ventilator.	L1	1	8
	i Categorize the two basic types of ventilators based on clinical usage in detail.	L2	1	8
	i			
12.	a i Explain about Transcutaneous Electrical Nerve Stimulator.	L2	2	8
	i Write a detailed note on IFT.	L2	2	8
	i			
	Or			
	b i Explain in detail about GAIT Assessment and Therapy.	L2	2	8

	i	Explain in detail about a. Electrodiagnosis b. Electrotherapy.	L2	2	8
	i				
13.	a	Describe about vacuum therapy unit.	L2	3	8
	i	Explain about wrinkle reduction in detail.	L2	3	8
	i				
		Or			
	b	Explain in detail about the following:	L2	3	8
		a. Treadmill			
		b. Bike			
	i	Explain about massager in detail?	L2	3	8
	i				
14.	a	What steps would you take to maintain a dental handpiece, and why is regular maintenance important for its performance?	L3	4	8
	i	How would you properly set up and utilize an oral evacuation	L3	4	8
	i	system during a dental procedure to ensure effective suction and patient comfort?			
		Or			
	b	How would you ensure that the decontamination unit is maintained regularly to comply with infection control standards?	L3	4	8
	i	What is the function of dental x-ray machine?	L3	4	8
	i				
15.	a	What pre- and post-procedural care would you implement to support the patient's recovery after undergoing lithotripsy?	L3	5	8
	i	How would you apply ultrasonic therapy in the treatment of a	L2	5	8
	i	patient with chronic muscle pain?			
		Or			
	b	Demonstrate the procedure for using Nd:YAG laser in clinical pain management.	L3	5	8
	i	Describe how you would apply Ruby laser therapy in a physiotherapy	L3	5	8
	i	setting.			