

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY****2025****Second Semester****Electrical and Electronics Engineering****BE3255/UBET24203-Basic Civil and Mechanical Engineering****Regulations – 2021/2024****Duration : 3 Hrs****Maximum : 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BLT	C O	Mark s
1.	Say how civil engineering is closely connected to the society.	L2	1	2
2.	List the disadvantages of automobile Engineering.	L1	1	2
3.	Name the two principles of surveying.	L1	2	2
4.	What is seasoning of timber?	L2	2	2
5.	List out the functions of columns.	L1	3	2
6.	Why Rainwater harvesting is important?	L1	3	2
7.	Differentiate two stroke and four stroke engines.	L2	4	2
8.	State: Compression Ratio.	L1	4	2
9.	Give some properties of a good refrigerant.	L2	5	2
10.	Define relative humidity.	L1	5	2

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

Q.No	Questions	BLT	C O	Mark s
11.	a Write briefly about all the disciplines of civil engineering with reference to their structure and applications.	L2	1	16
	Or			
	b i Describe the various forms and sources of energy.	L2	1	10
	ii Explain in detail about recent trend in Energy Engineering.	L2	1	6
12.	a i Explain about different types of leveling and its limitations.	L3	2	8
	ii Show with neat sketch the characteristic features of contour line.	L3	2	8
	Or			
	b What are the different types of cement? Explain the properties and uses.	L3	2	16

13.	a	What do you understand by the term foundation? Draw sketches to show various types of foundation.	L2	3	16
		Or			
	b i	Compare brick masonry and stone masonry.	L2	3	8
	ii	List the various factors to be considered while selecting a site for construction of dam.	L2	3	8
14.	a i	Explain the working principle of hydroelectric power plant with neat sketch.	L2	4	10
	ii	Discuss the difference between fire tube and water tube boiler.	L2	4	6
		Or			
	b i	Describe the working principle of two stroke diesel engine with neat sketch.	L2	4	10
	ii	Compare petrol (SI) engines and diesel (CI) engines.	L2	4	6
15.	a	Describe with neat sketch of vapour compression refrigeration system. List out the components and their functions.	L3	5	16
		Or			
	b	Discuss the window and split type room air conditioner.	L3	5	16