

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***BE/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 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)**

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	List out the sub disciplines of civil engineering.	L1	1	2
2.	List any four major sub disciplines in mechanical engineering.	L1	1	2
3.	Name the two principles involved in surveying.	L1	2	2
4.	Recall the chemical constituents of cement.	L1	2	2
5.	How to improve the bearing capacity of soil.	L1	3	2
6.	Name the different types of bridge.	L1	3	2
7.	List out the components of IC Engine.	L1	4	2
8.	Compare the single acting and double acting reciprocating pumps.	L2	4	2
9.	What are the desirable properties of good refrigerant?	L1	5	2
10.	What are the Psychometric processes?	L1	5	2

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

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Elaborate the criteria for selection of construction materials. Explain the roles of Civil Engineers in construction engineering.	L2	1	16
	Or			
	b Discuss the various inter disciplinary concepts of engineering with few examples to enhance values to their systems.	L2	1	16
12.	a Explain the various types of surveying and explain any two in detail.	L2	2	16
	Or			
	b Explain the different properties of good building brick.	L2	2	16
13.	a Explain the different types of foundations along with their features and include neat sketches.	L2	3	16
	Or			
	b Explain the rain water harvesting system with a neat sketch.	L2	3	16

14.	a	Explain the working principles of a steam power plant.	L2	4	16
		Or			
	b	Compare two stroke and four stroke petrol and diesel engines.	L2	4	16
15.	a	Explain with a neat sketch of Vapour Compression Refrigeration system.	L2	5	16
		Or			
	b	Explain the working principle of window air conditioner with a neat diagram.	L2	5	16