

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV /DEC 2024

Second Semester

Electrical Electronics Engineering

BE3255 - Basic Civil and Mechanical Engineering

Regulations - 2021

Duration : 3 Hrs

Maximum : 100 Marks

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

Q.No	Questions	BLT	CO	Marks
1.	What does construction engineering deals with?	RE	1	2
2.	State the contribution of mechanical engineering to society.	UN	1	2
3.	Differentiate fore bearing and back bearing.	UN	2	2
4.	What are the qualities of good brick?	RE	2	2
5.	How are the roofs classified in general?	RE	3	2
6.	Why rain water harvesting is important?	RE	3	2
7.	Compare petrol and diesel engines.	UN	4	2
8.	Give four important factors to be considered for selecting hydroelectric power plant.	RE	4	2
9.	Write the classification of refrigerants.	RE	5	2
10.	Define humidity.	RE	5	2

PART - B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)

Q.No	Questions	BLT	CO	Marks
11.	a Write briefly about all the disciplines of civil engineering with reference to their structure and applications.	UN	1	13
	Or			
	b Explain the various forms and sources of energy.	UN	1	13
12.	a Explain with a neat sketch prismatic compass and principles of compass surveying.	UN	2	13
	Or			
	b What are the different types of steel? Explain the properties and uses.	UN	2	13
13.	a Examine briefly the methods for improving the bearing capacity of soils.	AN	3	13
	Or			
	b List the factors for the selection of a suitable site for construction of dam.	AN	3	13
14.	a i Describe the principal, parts and functions of a two-stroke petrol engine with neat sketch.	UN	4	8
	ii Explain the term priming.	UN	4	5
	Or			
	b Describe the working principle of nuclear power plant and explain the advantages and disadvantages.	UN	4	13

15. a Discover the working principle of a split type room air conditioner with neat sketch. AN 5 13
- Or
- b Examine the working principle of a vapour compression refrigeration system with neat sketch. AN 5 13

*PART – C (Marks 1*15 = 15)*

<i>Q.No</i>		<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
16.	a	Discuss in detail about the measurement of land with different survey instruments in real world practical condition.	AP	2	15
		Or			
	b	Discuss the function of salient components of centrifugal pump with suitable diagram.	AP	4	15