Register No : _____

THE KAVERY ENGINEERING COLLEGE

(An Autonomous Institution)

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

Second Semester

Civil Engineering

PH3201/ UPHT24201 - Physics for Civil Engineering

Regulations – 2021/2024

Duration : 3 Hrs ***Maximum : 100 Marks***

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

Q.No	*Questions*	*BLT*	*CO*	*Marks*
1.	What is meant by fenestration?	L1	1	2
2.	What is thermal performance of the building?	L1	1	2
3.	State the principle of natural ventilation.	L2	2	2
4.	How does a fan coil system keep your buildings temperature stable?	L1	2	2
5.	What is meant by visual field glare?	L1	3	2
6.	Compare day lighting with artificial lightings.	L2	3	2
7.	Distinguish between crystalline and non crystalline ceramics.	L2	4	2
8.	What is isotatic pressing? Provide a few methods for manufacturing the manufacturing the materials?	L1	4	2
9.	Define intensity of earthquake?	L1	5	2
10.	Illustrate the categories of cyclone based on wind speeds their capacity to cause damage.	L2	5	2

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

Q.No			*Questions*	*BLT*	*CO*	*Marks*
11.	a		Explain the factors affecting thermal performance of building. State the difference kinds of thermal measurements.	L1	1	16
			Or			
	b	i	What is the gain and heat loss in buildings?	L1	1	6
		ii	Describe the elements that affect the building thermal performance using examples.	L1	1	10

12.	a	i	Explain the principle behind wind drive and the stack ventilation mechanism.	L1	2	10
		i	What is natural ventilation give the types of natural ventilation.	L1	2	6
		i	State the advantages and disadvantages of natural ventilation?			
			Or			
	b		Develop the design and operation of a fan coil system and its chilled water plant.	L1	2	16
13.	a		University today impact of noise in multistoried buildings and summarize the preventive measures to reduce nice in multi stored buildings.	L2	3	16
			Or			
	b		Discuss the importance of supplementary artificial lightings in detail.	L2	3	16
14.	a		Explain how ceramics can be manufactured by slip casting, isostatic pressing and gas pressure bonding methods.	L2	4	16
			Or			
	b		Explain the thermal, mechanical electrical and chemical properties of ceramics.	L2	4	16
15.	a		Classify earthquake ground motion with types, intensity magnitude.	L4	5	16
			Or			
	b		Elucidate in detail the cyclone under the flood hazards. What are the safety measures?	L4	5	16