

Roll No.

--	--	--	--	--	--	--	--	--	--

ANNA UNIVERSITY

B.E / B. Tech (Full Time) END SEMESTER EXAMINATIONS – APR / MAY 2024

CIVIL ENGINEERING

Semester

Subject code PH 7254

Subject Title Physics for Civil Engineering

(Regulation 2015)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

PART- A (10 x 2 = 20 Marks)

Q.No	Questions	Marks
1.	How shading devices can be classified?	2
2.	What is central heating?	2
3.	What is chilled water plant?	2
4.	How cooling load can be estimated?	2
5.	Define sound absorption coefficient.	2
6.	What are the methods to reduce glare?	2
7.	Mention the types of composite based on matrix material.	2
8.	Define Pseudo elasticity.	2
9.	Write the types of cyclone.	2
10.	Classify the types of fire based on combustible material.	2

PART- B (5 x 16 = 80 Marks)

(Q. No 11 is Compulsory)

Q.No	Questions	Marks
11.	Describe in detail to determine the thermal conductivity of rubber and powder material with neat diagram	16
12.	a) Explain in detail the different types of air conditioning systems for buildings.	16
	OR b) What is natural ventilation and mention its advantages? Explain the principle behind wind and stack ventilation mechanism	16
13.	a) Discuss the day light calculation and the use of models in daylight calculation.	16
	OR b) Describe any one method of measurement of sound absorption coefficient of a material.	16
14.	a) Explain in detail about the metallic glass, its types, preparation method and its properties.	16
	OR b) Explain the characteristics of ferroelectric, ferromagnetic and high aluminum ceramics.	16
15.	a) Define seismic waves. Explain P and S type waves	16
	OR b) Explain in detail about probabilistic and deterministic seismic hazard analysis.	16