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**Question Paper Code : 91139**

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2022.

Second Semester

Civil Engineering

PH 8201 — PHYSICS FOR CIVIL ENGINEERING

(Regulations 2017)

Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

State the significance of thermal comfort.

Mention the benefits of thermal insulation.

What is the role of sound absorbers in a good acoustical building?

A hall has a volume of 5000 m<sup>3</sup>. It is required to have reverberation of 1.5 second. What should be the total absorption in the hall?

What do you mean by glare? How does it affect the optical performance of the hall?

Define intensity of illumination. Mention few artificial light sources.

List the advantages of metallic glasses as transformer core materials.

State any four applications of High Aluminium ceramics?

What are the different types of seismic waves?

What is fire-proof material? Give some examples.

PART B — (5 × 16 = 80 marks)

(a) Discuss in detail the ventilation in a building and explain how is the ventilation measured?

Or

(b) Describe the air conditioning systems for different types of buildings and protection against fire caused by AC system.

