

## B.E / B.Tech. Degree End Semester Examinations, October / November 2012 Second Semester PH9161 PHYSICS FOR CIVIL ENGINEERING (Regulation 2008)

Time: 3 Hours

Answer ALL Questions

Max. Marks: 100

PART - A

 $(10 \times 2 = 20 \text{ Marks})$ 

- 1. What is seismology?
- 2. Mention the fire safety regulations.
- 3. What is meant by average -day -light factor?
- 4. Mention a few sound absorbing materials.
- 5. What are metallic glasses?
- 6. What is the role of matrix in FRP in composites?
- 7. What is natural ventilation?
- 8. What are the characteristics of good refrigerant?
- 9. What is meant by fenestration?
- 10. Mention a few important factors affecting the thermal performance of buildings.

 $(5 \times 16 = 80 \text{ Marks})$ 

- 11. Discuss various Hazards due to fire and the precautionary measures one has to take to meet the situation.
- 12. (a) Give an account of structural composite materials.

(OR)

(b) Explain the different ceramic fabrication techniques.

13. (a) Write a short note on (i) artificial lighting and (ii) different types of noises in buildings. (8 + 8 Marks)

(OR)

- (b) Discuss the methods of sound absorption in buildings.
- 14. (a) Discuss the heat flow through compound media in series and in parallel.

(OR)

- (b) Derive an expression for thermal conductivity in case of solids in the form of pipe using radial flow of heat.
- 15. (a) Discuss the fan coil with its block diagram and protection against fire caused by AC system.

(OR)

(b) Describe with neat block diagram, the function of a refrigeration cycle.