## M.E. Fourth Semester (Civil (Environmental Engineering)) (CBS)

13408 : Elective : Noise Pollution & Control : 4 SCEE 3

P. Pages: 1 AW - 3671 Time: Three Hours Max. Marks: 80 Notes: 1. All question carry equal marks. 2. Answer Three question From Section "A" and Three question from Section "B". Due credit will be given to neatness and adequate dimensions. 3. Assume suitable data wherever necessary. 4. SECTION - A Write a short note on nature of noise. Give the Indian standards for noise pollution. 1. 7 a) Describe with the neat sketch the propagation of Sound Wave in air. 7 b) 2. a) What are the zone wise ambient noise levels as recommended by the Central Pollution 7 Control Board? Explain the purpose of active band analysis. 6 b) 3. Discuss in brief effects of noise pollution on human ear. 6 a) Distinguish between impulsive noise and steady state noise. b) 7 Differentiate between air pollution and noise pollution. 6 4. a) b) Explain various mobile and non-mobile sources of noise. Explain in detail the measurement and assessment of noise control facilities. 7 5. a) 6 Discuss various protective devices used for human ear. b) **SECTION - B** Discuss in details various steps taken to control noise at industrial complex. 6. Explain test and evaluation method used for the analysis of vehicle noise. 7. a) Explain the methods used for measuring vibrations of road vehicles. b)

- What is traffic noise index? 8. a)
  - What are future prospects for the reduction of traffic noise? b)
- 9. a) Discuss the provision made in the legislation to control noise pollution in India.
  - Give some of the international noise level standards. b)
- Explain chronic & acute type of hearing loss. Explain different phases of chronic type 10. a) hearing loss.
  - Discuss the impact assessment of noise due to stationary and mobile sources. b)

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