

Total No. of Questions : 8]

SEAT No. :

P3777

[4760]-89

[Total No. of Pages : 2

M.E. (Civil) (Water Resource and Environmental Engg.)

NOISE POLLUTION AND CONTROL TECHNIQUE

(2012 Course) (Semester - II) (Elective - III)

Time : 3 Hours]

[Max. Marks :100

Instructions to the candidates:

- 1) *Answers to the two sections should be written in a separate answer books.*
- 2) *Attempt three questions from each section.*
- 3) *Figure to the right indicates full marks.*
- 4) *Neat diagrams must be drawn wherever necessary.*

SECTION - I

Q1) Explain sound propagation characteristics with neat sketch. Clarify how sound is absorbed in air. **[16]**

Q2) Define intensity of noise? How it can be measured? Also discuss equal Loudness counters with neat sketch. **[16]**

Q3) Discuss with sketches sound/noise signal and its power spectrum. **[16]**

Q4) Write note on: **[18]**

- a) Sources of noise.
- b) Protective equipment's and basic principles of noise control.
- c) Sound level meter.

SECTION - II

Q5) Enlighten the effect of noise on task performance and Cardio-vascular system. Explain with case studies. **[16]**

P.T.O.

Q6) a) Enlist various sources of noise pollution specially related to civil Engineering works. How they are controlled at source. [8]

b) Discuss various sources of Noise from industry and its control measures. [8]

Q7) Explain in detail traffic noise? Also discuss any one case study of traffic noise due to various vehicles. [16]

Q8) Write note on: [18]

a) Existing legal provisions for controlling noise and noise level standards.

b) Air craft and Airport noise any case study.

c) Noise pollution control measures.

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