

Total No. of Questions : 8]

SEAT No. :

P4231

[4860]-616

[Total No. of Pages : 2

M.E. CIVIL (Water Resource and Environmental Engg.)
b - NOISE POLLUTION AND CONTROL TECHNIQUE
(Elective - III) (2012 Pattern) (Semester - II)

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) Figures to the right indicates full marks.*
- 4) Neat diagrams must be drawn wherever necessary.*

SECTION - I

Q1) Draw neat sketch and discuss sound propagation characteristics. Also state how sound is absorbed in air. **[16]**

Q2) Draw a neat sketch of Human ear showing its main parts and explain Hearing mechanism. Also discuss the concept of Sleep disturbance. **[16]**

Q3) Enlist various instruments for measurement of noise and explain in brief any two techniques for measurement of noise. Also state various sources of noise. **[16]**

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

- a) Sound/noise signal and its power spectrum.
- b) Protective equipment's and basic principles of noise control.
- c) Noise in Home and its control.

SECTION - II

Q5) a) What is noise labeling ? Also discuss how noise diagnostics studies are carried out ? **[8]**

- b) Enlist sources of Noise pollution due to civil Engineering constructions and give remedial measures to reduce the noise pollution. **[8]**

P.T.O

- Q6)** a) Discuss the effect of noise on task performance and cardio-vascular system. [8]
- b) Compares Noise Induced Hearing Loss (NIHL) and Noise Induced Temporary Threshold Shift (NITTS) [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) Noise from Industry and its control.
- b) Air craft and Airport noise any one case study.
- c) Legal provisions in India to avoid noise pollution.

