USN | | | | | | | | | | |

09ARC6.3

Sixth Semester B.Arch. Degree Examination, June/July 2015
Building Services - IV

Time: 3 hrs. Max. Marks:100

Note: ***Answer any FIVE full questions, selecting THREE from Part – A and TWO from Part - B.***

PART – A

1 Write short notes on :
   a. Frequency of sound
   b. Sound intensity
   c. Decibel scale
   d. Inverse square law. **(20 Marks)**

2 a. With a neat sketch explain how sound behaves in enclosed space. **(10 Marks)**
   b. Explain the various space acoustic defects. **(10 Marks)**

3 What is reverberation? Explain its relevance in acoustics? **(10 Marks)**
   Explain Sabire's equation. **(10 Marks)**

4 Write short notes on :
   a. Sound absorption coefficient
   b. Helmholtz resonater
   c. Vibration isolation
   d. Space absorbers. **(20 Marks)**

5 As the architect of a proposed auditorium, what would be your recommendations with respect to :
   a. Room geometry
   b. Visibility
   c. Audibility
   d. Acoustic treatment. **(20 Marks)**

PART – B

6 Discuss noise control measures applicable in outdoor urban noise control. **(20 Marks)**

7 Write short notes on :
   a. sound masking
   b. Transmission loss
   c. Noise reduction co-efficient (NRC)
   d. Floating floor construction. **(20 Marks)**

8 Explain the following :
   a. Noise control in office buildings. **(10 Marks)**
   b. Control of noise generated by HVAC system. **(10 Marks)**

* * * * *