18ARC73

Seventh Semester B.Arch. Degree Examination, Dec.2023/Jan.2024 **Building Services - IV**

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

1 Describe the characteristics and measurement of sound with relevant diagram. (20 Marks)

OR

Discuss the room acoustics with reflection, absorption, echoes, reverberation with sketches.
(20 Marks)

Module-2

3 Describe various acoustical tools and measurements with appropriate sketches. (20 Marks)

OR

Discuss about the acoustical materials which will enhance the existing spaces. (20 Marks)

Module-3

5 Explain Transmission of Noise in a Multi-storied school building through sketches.

(20 Marks)

OR

6 Conference room is located next to the AHV in a industrial space. Suggest suitable construction details with sketches. (20 Marks)

Module-4

7 Explain machine isolation and staggered wall STVD construction with neat sketches.

(20 Marks)

OR

What is environmental noise control? Explain mass law and design principles for reduction at and near source with sketches. (20 Marks)

Module-5

9 What are the various sources of industial noise pollution? Explain any 5 causes. (20 Marks)

OR

Describe the role of architects and urban planners in shaping the urban soundscape with sketches. (20 Marks)

* * * * *

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.