

# CBCS SCHEME



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## 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

2 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

4 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

8 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 industrial noise pollution? Explain any 5 causes. (20 Marks)

OR

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

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