

# CBCS SCHEME



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18ARC73

## Seventh Semester B.Arch. Degree Examination, June/July 2025 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 a. Explain fundamental attributes of sound. (10 Marks)  
b. Explain inverse square law of sound with suitable explanation and sketches. (10 Marks)

OR

- 2 Explain behavior of sound in an enclosed space with appropriate sketches. (20 Marks)

### Module-2

- 3 What are the different acoustical tools and measurements and its applications. (20 Marks)

OR

- 4 Explain different porous materials in acoustics with their applications and role of acoustics diffusers. (20 Marks)

### Module-3

- 5 Briefly explain the design aspects of auditorium. Give sketches pertaining to different shapes and forms of auditorium. (20 Marks)

OR

- 6 Write short notes on acoustical design of :  
i) OAT  
ii) Home Theatre  
iii) Recording studio  
iv) Hall for indoor sports. (20 Marks)

### Module-4

- 7 Explain in detail various sources of urban noise pollution and its methods to control its impact on environment. (20 Marks)

OR

- 8 Explain structure borne noise in detail. Give appropriate examples. (20 Marks)

### Module-5

- 9 a. Explain in detail various industrial noise pollution, and methods to control its impact on environment. (10 Marks)  
b. Industrial noise pollution effect on industrial workers and environment. (10 Marks)

OR

- 10 Explain noise control and reduction by site planning, town planning consideration and regional planning consideration support your answers 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.