



**Building Environment & Services
(1010)**

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Attempt **any five** questions.
5. Illustrate your answers with suitable sketches.
6. Answers should be written in same answer book.

1. a) Explain general principles of Acoustical design. Explain effect of volume and shape on the acoustical performance of an auditorium. **10**
b) Explain and sketch natural and artificial lighting in buildings. **10**
2. a) Explain special provisions of electric supply to multi storeyed buildings. **10**
b) Explain elevators escalators & conveyers. **10**
3. a) Explain fire load. Write explanatory note on fire resisting properties of bricks & concrete. **10**
b) Enlist different fire protection systems. Explain any one in detail. **10**
4. a) What are principles of thermal insulation ? How thermal insulation of exposed walls is done ? **10**
b) Explain electrical wiring system in buildings. **10**
5. a) Discuss water supply systems for buildings. **10**
b) Explain the importance of electrical grounding in buildings. **10**

6. a) Discuss the maintenance swimming pool components. 10
b) With a neat sketch explain external drainage system for buildings. 10
7. a) Explain testing, jointing & installation of pipes in buildings. 10
b) Explain roof water harvesting & water conservation. 10
8. a) What are the systems of plumbing ? Explain any two with neat sketch. 10
b) Discuss the working & maintenance of pressure filters used for recirculation in swimming pools. 10
