

# CBCS SCHEME

BCV306D

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Third Semester B.E./B.Tech Degree Examination, Dec.2023/Jan.2024

## Fire Safety in Buildings

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.

2. M : Marks , L: Bloom's level , C: Course outcomes.

Module – 1			M	L	C
Q.1	a.	Define Fire. Basic concepts of fire protection.	10	L2	CO1
	b.	Explain design of fire resistance steel – structure.	10	L2	CO1
OR					
Q.2	a.	Explain fire as a process of combustion.	10	L2	CO1
	b.	Explain effect of fire on concrete, steel, timber, plastic.	10	L2	CO1
Module – 2					
Q.3	a.	Define urban planning, aspects of urban planning.	10	L2	CO2
	b.	Define Lift and classification of Lift.	10	L2	CO2
OR					
Q.4	a.	Define escalators and factors affecting escalators design.	10	L2	CO2
	b.	Explain advantages and disadvantages of elevators/Lifts.	10	L2	CO2
Module – 3					
Q.5	a.	Define flow system, explain types of flow system.	10	L3	CO3
	b.	Explain water supply diversity factors.	10	L2	CO3
OR					
Q.6	a.	Explain system of flow in waste water pipes.	10	L2	CO3
	b.	Define and explain water sprinkler types.	10	L2	CO3
Module – 4					
Q.7	a.	Define HVAC and governing equations to HVAC process.	10	L2	CO4
	b.	Explain factors to be considered while designing and planning electrical installation.	10	L2	CO4
OR					
Q.8	a.	Explain electrical power distribution system in building.	10	L2	CO4
	b.	Explain steps involved in maintenance planning.	10	L2	CO4
Module – 5					
Q.9	a.	Explain effect of corrosion and alkali aggregate reactions.	10	L2	CO5
	b.	Define NDT? Explain rebound hammer test.	10	L3	CO5
OR					
Q.10	a.	Explain the repair stages of a building.	10	L2	CO5
	b.	Explain carbonation, chloride attack and sulphate attack.	10	L2	CO5

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