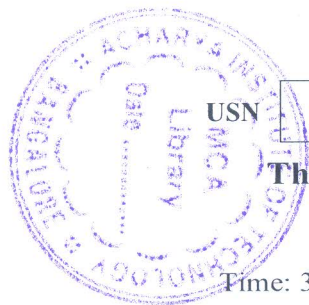


CBCS SCHEME



BCV306D

Third Semester B.E./B.Tech. Degree Examination, June/July 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.	What are the safety measures to be adopted in advance to prevent a fire in a building?	10	L2	CO1
	b.	Write short notes on the following : i) Effect of fire on construction materials ii) Role of oxygen in combustion iii) Planning for fire protection iv) Fire escape v) Fire Hazard losses	10	L2	CO1
OR					
Q.2	a.	Discuss the fire as a process combustion, explain the steps for the fire protection.	10	L2	CO1
	b.	Explain the design of fire resistance reinforced concrete building and steel framed structure.	10	L2	CO1
Module – 2					
Q.3	a.	Explain urban planning, escape and refuge in detail.	10	L2	CO2
	b.	What are the main objectives of the fire safety? List out the various types of fire extinguishers.	10	L2	CO2
OR					
Q.4	a.	Write briefly about the following : i) lift design ii) external escape route.	10	L2	CO2
	b.	What are general guidelines for good fire safety management?	10	L2	CO2
Module – 3					
Q.5	a.	Explain with a neat sketch of water supply system for a building.	10	L2	CO2
	b.	Write short notes on the following : i) Constant demand ii) Diversion factor.	10	L2	CO2
OR					
Q.6	a.	Explain water control system in pipe networks and fixtures units.	10	L2	CO3
	b.	Explain flow in waste water pipes in detail.	10	L2	CO3
Module – 4					
Q.7	a.	What is HVAC system? Write briefly about psychometric chart.	10	L2	CO4
	b.	Write short notes on the following : i) Life cycle of cost ii) intelligent building iii) estimation of repair cycle iv) building maintenance v) interpretation of test result.	10	L2	CO4

OR					
Q.8	a.	Write briefly about building inspection, planned and adhoc maintenance.	10	L2	CO4
	b.	Discuss briefly cost profile maintenance of a building.	10	L2	CO4
Module – 5					
Q.9	a.	Explain briefly health evaluation surveys of a buildings.	10	L2	CO5
	b.	Write short notes on the following : i) Effect of corrosion Alkali Aggregate reaction ii) Condition survey iii) Non destructive testing iv) The benefits of non destructive testing v) Core strength test	10	L2	CO5
OR					
Q.10	a.	Explain briefly Carbonation and Chloride measurement test.	10	L2	CO5
	b.	Exp[lain the method of retrofitting in building.	10	L2	CO5
