CBCS SCHEME

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BETCK105B

First Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026
Green Building

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.

			M	L	C
		Module – 1			
Q.1	a.	Define Green Building. Explain its need and objectives in modern construction.	10	L1,2	CO1
	b.	Discuss the benefits and principles of sustainable construction practices.	10	L2	CO1
		OR			
Q.2	a.	Explain the concept of sustainability in building design.	10	L2	CO1
	b.	Differentiate between conventional building and green building.	10	L2	CO1
		Module – 2			
Q.3	a.	List any five eco-friendly building materials and explain their advantages.	10	L1,2	CO2
	b.	Explain Rat-Trap Bond masonry with heat sketch and mention its benefits.	10	L2	CO2
		OR			
Q.4	a.	Write short notes on the following : i) Fly ash Bricks ii) Bamboo iii) Ferro cement	10	L1	CO2
	b.	Explain the concept of pre engineered and ready to use building elements.	10	L2	CO2
		Module – 3			
Q.5	a.	Define Global Warming. Explain its causes and effects in brief.	10	L1,2	CO3
	b.	What is Carbon Footprint? Describe measures to reduce it in buildings.	10	L2	CO3
		OR			
Q.6	a.	Explain Embodied Energy and life cycle cost in buildings.	10	L1	CO3
	b.	Discuss how construction practices contribute to global warming.	10	L1	CO3
		Module – 4			
Q.7	a.	What is a Green Building Rating System? Explain any two system LEED and GRIHA.	10	L2	CO4
	b.	Explain the key parameters used in rating a green building.	10	L2	CO4
		OR			
Q.8	a.	State the objectives and purpose of green rating systems.	10	L1	CO4
	b.	Explain BREEAM and Indian Green Building Council (IGBC).	10	L2	CO4
		Module – 5			
Q.9	a.	Explain the use of solar energy in buildings for passive heating and cooling.	10	L2	CO5
	b.	Describe the importance of water management and rain water harvesting in sustainable buildings.	10	L2	CO5
		OR			
Q.10	a.	Write short notes on: i) Solid Waste Management ii) Urban Green Cover	10	L1	CO5
	b.	Explain Low Energy Approaches in building design with suitable examples.	10	L2	CO5

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