

Lesson Plan

Name of the Faculty: Deepak Kumar Panwar

Discipline : Civil Engineering

Semester : 6th sem

Subject: Green Building

Lesson Plan (January 2026 -May 2026) 15 weeks

Duration :

(Teaching hours :Theory=3)

Week	Lecture day	Topic	Delivery Date of Lecture	Whether the lesson Plan followed? Yes/No
1st	1	Green Building Planning: Objectives, Benefits, Principles and Features of green building		
	2	Site selection and planning of Green building		
	3	Green Building Design Concepts		
2nd	4	Passive solar design concepts, Orientation, Building Envelope		
	5	Roof, Walls, Fenestration, Shading and Color		
	6	Eco-friendly Green Building Materials: Bamboo, Rice husk		
3rd	7	ash concrete, Plastic bricks, Bagasse particle board, Insulated concrete forms,		

	8	Fly ash bricks, Autoclave aerated blocks, Hollow concrete blocks		
	9	Sun controlled glass, UPVC windows, Sun reflective paints		
4th	10	Reuse of waste material: Plastic, Rubber, Newspaper,		
	11	Wood, Nontoxic paint, Green roofing.		
	12	Revision		
5th	13	Sessional Test-1		
	14	Renewable Energy Systems: Solar Thermal Systems		
	15	Solar Water Heating System, Solar chimney, Wind mills		
6th	16	Solar Photovoltaic Systems; Rooftop Solar Power Plant,		
	17	Solar Lights, Net-metering system		
	18	Energy Efficiency: Use of Energy Conservation Building Code (ECBC)		
7th	19	Energy Efficient Star Labelled Appliances,		
	20	Energy monitoring and evaluation		
	21	Energy Auditing		
8th	22	implementation of energy conservation measures		
	23	Water Efficiency: Use of water efficient fixtures for kitchen		
	24	washrooms (water closets & urinals)		
9th	25	landscape gardens		
	26	Rainwater harvesting		
	27	Waste water management		

10th	28	Indoor Environment Quality: Natural air ventilation		
	29	Natural air ventilation, Day lighting		
	30	various types of low Volatile Organic Compounds materials		
11th	31	various types of low Volatile Organic Compounds materials		
	32	Green Building Rating and Certification		
	33	Features, criterion		
12th	34	Features, criterion		
	35	compliance of the Leadership in Energy and Environment Design		
	36	compliance of the Leadership in Energy and Environment Design		
13th	37	Sessional Test – 2		
	38	(LEED India), Green Rating for Integrated Habitat Assessment (GRIHA)		
	39	, (LEED India), Green Rating for Integrated Habitat Assessment (GRIHA)		
14th	40	Bureau of Energy Efficiency (BEE).		
	41	Bureau of Energy Efficiency (BEE).		
	42	Revision		

15th	43	Revision		
	44	Sessional Test - 3		
	45	Revision		