

CBCS SCHEME



BETCK105B

First Semester B.E./B.Tech. Degree Examination, June/July 2025 Green 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 the term Green Building. Explain any four green building materials.	10	L1	CO2
	b.	List down the environmental impacts of building.	10	L2	CO1
OR					
Q.2	a.	(i) What is meant by stabilized mud block? (ii) What are the environmental impact of brick manufacturing.	10	L2	CO1
	b.	(i) What is meant by fibre-reinforced polymer composite? (ii) Explain the benefits of adding lime to concrete.	10	L2	CO1
Module – 2					
Q.3	a.	Write short notes on : (i) Filler slab (ii) Composite beam and panel roof (iii) Ferro-concrete	10	L2	CO2
	b.	Explain role of Nirmithi Kendra and Habitat in developing and propagating cost-effective construction.	10	L2	CO2
OR					
Q.4	a.	Write notes on : (i) Cavity wall construction (ii) Corner wall comprising rat trap bond	10	L2	CO2
	b.	(i) Write any five advantages of pre-engineered buildings. (ii) What are the categories of building frame?	10	L2	CO2
Module – 3					
Q.5	a.	(i) What is meant by Global Warming? Explain. (ii) Explain the effect of global warming.	10	L2	CO3
	b.	Explain environmental benefits of Green buildings.	10	L2	CO3
OR					
Q.6	a.	Compare green building with conventional building.	10	L2	CO3
	b.	Explain the environmental life cycle of building.	10	L2	CO3
Module – 4					
Q.7	a.	Discuss green rating for integrated habitat assessment.	10	L2	CO4
	b.	Discuss fundamental principles of sustainable building design.	10	L2	CO4
OR					
Q.8	a.	What is BREEAM certified building?	10	L2	CO4
	b.	What is the difference between BREEAM and LEED?	10	L2	CO4
Module – 5					
Q.9	a.	Define Solar Energy. Which are the two main categories of solar power?	10	L2	CO5
	b.	Write a short note on solar heating and cooling.	10	L2	CO5
OR					
Q.10	a.	Explain : (i) Sullage (ii) Sewage	10	L2	CO5
	b.	Explain the concept of Green composites.	10	L2	CO5
