



CBCS SCHEME

BETCK105B/BETCKB105

First Semester B.E./B.Tech. Degree Examination, June/July 2023

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.	What is meant by stabilized mud block? Is it energy efficient than conventional block?	10	L2	CO1
	b.	List the environmental issues related to quarrying of building materials.	10	L2	CO1
OR					
Q.2	a.	What is meant by Fiber reinforced cement composite? Explain materials used in fiber reinforced cement composite.	8	L2	CO1
	b.	Explain any six cost effective construction materials.	12	L2	CO1
Module – 2					
Q.3	a.	Write short notes on : i) Filler slab ii) Composite beam and panel roof iii) Ferro cement.	15	L2	CO2
	b.	Draw plan of odd and even courses of a corner wall comprising rat trap bond. Also draw elevation.	5	L2	CO2
OR					
Q.4	a.	Write any five advantages of pre engineered buildings. Also state disadvantages.	10	L2	CO2
	b.	Give with examples materials used for walls and roofs of energy efficient and environment friendly building.	10	L2	CO2
Module – 3					
Q.5	a.	Explain the effect of Global warming.	5	L2	CO3
	b.	Explain Contributions of buildings towards global warming.	10	L2	CO3
	c.	What is meant by Integrated Life Cycle design of materials and structures?	5	L2	CO3
OR					
Q.6	a.	Explain the alternative technologies used in Green building.	10	L2	CO3
	b.	State advantages of Green Building over traditional building.	10	L2	CO3
Module – 4					
Q.7	a.	Explain the mandatory rules in GRIHA related to construction.	10	L2	CO4
	b.	Explain the components of embodied energy.	10	L2	CO4

OR

Q.8	a.	Analyze the Green Building rating system in India.	10	L2	CO4
	b.	Explain the phases of LCA and state its advantages and disadvantages.	10	L2	CO4

Module – 5

Q.9	a.	Discuss why solar powered buildings are energy efficient.	10	L2	CO5
	b.	Summarize with case study the solar passive cooling of buildings.	10	L2	CO5

OR

Q.10	a.	Describe the usage of recycling sullage and sewage. Also explain the recycling process.	10	L2	CO5
	b.	What are the challenges faced by urban areas in sustainable water management? Explain.	10	L2	CO5
