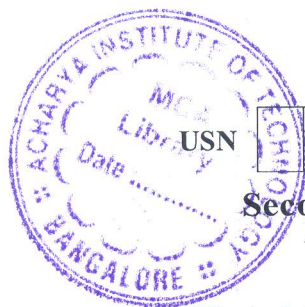


# CBCS SCHEME

BETCKB205/BETCK205B



Second 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.	Explain briefly the manufacturing process of Burnt bricks.	10	L2	CO1
	b.	Discuss the advantages and disadvantages of stabilized Mud Blocks.	10	L2	CO1
OR					
Q.2	a.	Explain the concept of Recycling of building materials and also discuss the necessity of concrete recycling as a building material.	10	L2	CO1
	b.	Explain the following : (i) Gypsum board (ii) Fiber reinforced polymer composite.	10	L2	CO1
Module – 2					
Q.3	a.	Discuss the advantages and disadvantages of Rat-trap Bond.	10	L2	CO2
	b.	Explain the following with neat sketch : (i) Cavity walls. (ii) Filler slab.	10	L2	CO2
OR					
Q.4	a.	Explain briefly the concept of Pre-Engineered Building (PEB).	10	L3	CO2
	b.	Explain the role of Nirmithi Kendra and Habitat in developing and propagation cost effective construction.	10	L2	CO2
Module – 3					
Q.5	a.	Explain the effect of Global Warming. Also discuss the contribution of building towards Global Warming.	10	L3	CO3
	b.	Explain the following : (i) Carbon footprints. (ii) Embodied energy in materials.	10	L2	CO3
OR					
Q.6	a.	Define Green Building? Explain why Green buildings are necessary. And discuss the environmental benefits of green building.	10	L3	CO3
	b.	Explain the concept of life cycle cost of the building with neat sketch/flow chart.	10	L3	CO3
Module – 4					
Q.7	a.	List the various systems used for rating the green building in India and explain any one in detail.	10	L2	CO4
	b.	Explain the following : (i) BREEM (ii) Green Design	10	L2	CO4
OR					
Q.8	a.	Differentiate between LEED and GRIHA rating system of green building.	10	L2	CO4
	b.	Explain the basic principles of sustainable development in building design and also mention the characteristics of sustainable buildings.	10	L2	CO4

Q.9	a.	What are the various water efficient methods of building. And explain any one method in detail.	10	L2	CO5
	b.	Discuss the methods of sewage treatment and explain the processes of treatment units with the help of flow chart.	10	L3	CO5
<b>OR</b>					
Q.10	a.	Explain the passive solar cooling and heating techniques in building.	10	L3	CO5
	b.	List out the different methods of manufacturing of Green composites and explain any one method with neat sketch.	10	L2	CO5

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