

U.S.N.

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

February / March 2024 Semester End Main Examinations**Programme: B.E.****Branch: Common to all Branches****Course Code: 23CV1ESGBT****Course: Green Buildings****Semester: I****Duration: 3 hrs.****Max Marks: 100**

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.			UNIT - I	CO	PO	Marks
	1	a)	Explain the various means by which carbon emissions can be reduced / controlled.	CO 1	PO 6	10
		b)	Illustrate the difference between conventional buildings and green buildings	CO 1	PO 6	10
			UNIT - II			
	2	a)	Explain Fiber reinforced polymer composites stating its advantages and applications	CO 2	PO 7	10
		b)	Explain the need for reuse and recycle of building materials along with its benefits	CO 2	PO 7	10
			OR			
	3	a)	What are the factors to be considered for selecting the masonry units for construction of walls? Considering the options of concrete blocks and bricks which is a better sustainable material.	CO 2	PO 7	10
		b)	Discuss Bamboo as a building material in green construction.	CO 2	PO 7	10
			UNIT - III			
	4	a)	Explain the ferro cement construction process and list the different ferro cement products	CO 3	PO 6	10
		b)	State the different types of wall construction practices and explain any two.	CO 3	PO 6	10
			OR			
	5	a)	'Precast concrete construction is the way forward'. Justify this statement.	CO 3	PO 6	10
		b)	Discuss the role of non-profitable and government agencies towards cost effective construction practices.	CO 3	PO 6	10
			UNIT - IV			
	6	a)	Explain passive solar design basics for heating and cooling of buildings	CO 4	PO 6	10

		b)	Describe how effective management of solid wastes can be achieved.	<i>CO 4</i>	<i>PO 7</i>	10
			UNIT - V			
7	a)		What is GRIHA rating system? Mention its purpose and list key highlights	<i>CO 5</i>	<i>PO 8</i>	10
	b)		Outline and explain the principles and characteristics of sustainable buildings	<i>CO 5</i>	<i>PO 8</i>	10

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