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

Autonomous Institute Affiliated to VTU

February / March 2024 Semester End Main Examinations

Programme: B.E.

Semester: I

Branch: Common to all Branches

Duration: 3 hrs.

Course Code: 23CV1ESGBT

Max Marks: 100

Course: Green Buildings

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

			UNIT - I	CO	PO	Marks
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.	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.	CO 4	PO 7	10
		UNIT - V			
7	a)	What is GRIHA rating system? Mention its purpose and list key highlights	CO 5	PO 8	10
	b)	Outline and explain the principles and characteristics of sustainable buildings	CO 5	PO 8	10

B.M.S.C.E. - ODD SEM 2023-24