U.S.N.										

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

Autonomous Institute Affiliated to VTU

May 2024 Semester End Main Examinations

Programme: B.E. **Semester: VIII**

Branch: Computer Science and Engineering **Duration: 3 hrs.**

Course Code: 21CS8PCGCT **Max Marks: 100**

Course: Green Computing

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)		Describe the holistic approach of Green IT.	*CO1*	*PO2, 7*	**5**
	b)		Analyze the 3Rs of green IT.	*CO2*	*PO2,7*	**5**
	c)		Demonstrate the various stages in the life cycle of an electronic device with its neat diagram.	*CO3*	*PO2,7*	**10**
			UNIT - II			
2	a)		Analyze the techniques that can apply for software energy efficiency.	*CO2*	*PO1,7*	**8**
	b)		List and explain software sustainability metrics and attributes.	*CO2*	*PO1,7*	**12**
			UNIT - III			
3	a)		Sustainability encompasses environmental, social and economic dimensions. Justify your answer.	*CO2*	*PO2,7*	**10**
	b)		Discuss the various key elements of IT infrastructure of a data centre.	*CO2*	*PO2,7*	**10**
			OR			
4	a)		Demonstrate the influence of business drivers of Green IT strategy with neat diagram.	*CO1*	*PO1,7*	**10**
	b)		Analyze the various domain-specific context data required to achieve energy efficiency.	*CO2*	*PO1,7*	**10**
			UNIT - IV			
5	a)		Demonstrate the demanufacturing and reverse logistics process with a diagram.	*CO2*	*PO3,7*	**10**
	b)		Discuss in detail the four major categories of enablers for green IT.	*CO2*	*PO3,7*	**10**

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			UNIT - V			
	6	a)	Analyze the four key factors that have enabled cloud computing to create lower energy usage and carbon emissions for ICT.	*CO3*	*PO3,7*	**10**
		b)	Discuss the issues of information management for environmental sustainability.	*CO3*	*PO3,7*	**10**
			OR			
	7	a)	Illustrate the use of Semantic Web with an example.	*CO3*	*PO3,7*	**10**
		b)	Outline the seven-step approach that will help enterprises to develop and implement an enterprise green strategy.	*CO3*	*PO3,7*	**10**

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