U.S.N.										

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

Autonomous Institute Affiliated to VTU

September / October 2023 Supplementary Examinations

Programme: B.E. **Semester: VIII**
Branch: Computer Science and Engineering **Duration: 3 hrs.**
Course Code: 21CS8PCGCT **Max Marks: 100**
Course: Green Computing **Date: 19.09.2023**

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

1	a)	Demonstrate the holistic approaches to Green IT.	**10**
	b)	Briefly outline the life cycle of a device.	**10**

UNIT - II

2	a)	Summarize the C-state and P-state of processor power	**05**
	b)	Sustainability encompasses three dimensions of software, Justify.	**05**
	c)	Given a software system, justify how do you evaluate the sustainability of a software performance.	**10**

UNIT - III

3	a)	Analyze different types of servers required for data centre IT Infrastructure	**05**
	b)	Describe the need for server power management	**10**
	c)	Explain the various challenges of next generation networks.	**05**

OR

4	a)	Discuss the objectives of energy optimizing protocol design.	**10**
	b)	Analyze the various network domain specific context data required to achieve energy efficiency with respect to green network and communication.	**10**

UNIT - IV

5	a)	Demonstrate the various methods of strategizing Green IT initiatives.	**10**
	b)	Illustrate with an example, the continuous risk management functions for the life cycle of a project.	**10**

UNIT - V

6	a)	Outline the key characteristics of cloud computing with neat diagram	**10**
	b)	Describe the features of Mediawiki platform.	**10**

OR

7	a)	Companies and people expect IT roles in minimizing business in environmental footprint. Discuss the Green IT trends for it.	**10**
	b)	With a neat diagram, demonstrate enterprise-wide environmental sustainability.	**10**

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