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

Autonomous Institute Affiliated to VTU

September / October 2023 Supplementary Examinations

Programme: B.E.

Semester:8th

Branch: Electronics and Communication Engineering

Duration: 3 hrs.

Course Code: 16EC8DCECS

Max Marks: 100

Course: Electronics and Communication for Sustainable Development

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) Illustrate a WSN for smart agriculture and briefly explain the objectives of a greenhouse monitoring system.	10
	b) Analyze various characteristics of WSN to implement crop health management system.	10

UNIT - II

2	a) Illustrate the electrical structure of R+iSpace and mobile module for flexible smart space.	10
	b) Analyze and explain the CASAS HiB design and discuss on its usability.	10

OR

3	a) Illustrate intelligent space. Mention the problems identified in earlier systems. What are the necessary conditions a new system must have?	10
	b) Discuss on different approaches of activity recognition to scale the capabilities of smart environment	10

UNIT - III

4	a) Illustrate the significance of smart grid and smart energy use to reach the goal of low carbon economies.	10
	b) Explain the utility of fiber wireless sensor network for smart energy use with the architecture diagram	10

OR

5	a) Illustrate significance of Body Area Networks for Smart Healthcare.	10
	b) Illustrate how the Personal lighting management system reduces energy waste while improving the comfort of the users.	10

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 -IV

6	a)	Explain how Telemedical system architecture can be utilized for healthcare application.	10
	b)	Discuss about the various challenges faced by Body sensor networks in clinical and hospital structures.	10

UNIT -IV

7	a)	Illustrate Customizing a Vehicle for Multiple Drivers and individual authority by Applying RFID Techniques as an example of automotive RFID application.	10
	b)	Briefly discuss on the social sensor networks for transportation management in smart cities.	10
