

U.S.N.								
--------	--	--	--	--	--	--	--	--

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

Autonomous Institute Affiliated to VTU

February / March 2023 Semester End Main Examinations

Programme: B.E.

Semester: VII

Branch: Electronics & Telecommunication Engineering

Duration: 3 hrs.

Course Code: 19ET7PCSTN

Max Marks: 100

Course: Sustainable Telecom Networks

Date: 05.03.2023

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)	Discuss the feasible solutions proposed for the Telecommunications Sustainability?	08
	b)	Analyse the strategies adopted by JIO to sustain their operations	06
	c)	Explain any three Drivers of sustainability	06

UNIT - II

2	a)	List the various measures to increase energy efficiency in wireless networking. And explain any two of them in brief	08
	b)	What is meant by “GREEN” in telecommunication networks? Explain. What are the levels at which it is achieved?	06
	c)	Discuss the environmental impact of ICT	06

UNIT - III

3	a)	What are Points of Interconnect (PoI)? Explain the role of TRAI in amicably resolving the PoI dispute between Reliance Jio and the incumbent operators?	08
	b)	Discuss the Mobile number portability regulations	06
	c)	What are the powers and responsibilities of DoT (Department of Telecommunications)?	06

OR

4	a)	Define Interconnection usage charges. Discuss any three types	08
	b)	Discuss the Principles set by TRAI for Efficient Interconnection Price Structure	06
	c)	Discuss the criteria of Mobile Number Portability Request	06

UNIT - IV

5	a)	Define SAR. Explain its significance with respect to telecommunication networks. How are SAR levels tested?	08
---	----	---	-----------

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.

- b) Discuss the effect of radiation on human body **06**
- c) Is it safe to live or work on the top floor of a building that has a mobile phone base station antenna on it? Explain **06**

UNIT - V

- 6 a) Explain the price equation in detail with the proposed framework block diagram. **08**
- b) What is a dynamic pricing model? Why is it needed?. **06**
- c) Write a note on Marketing and Pricing Strategies of Jio? **06**

OR

- 7 a) Explain different Pricing Approaches in the Telecom Sector. **08**
- b) What is a Revenue Model? How is it different from business model? **06**
- c) Discuss the three transformation goals of Vodafone **06**
