PES University, Bengaluru
(Established under Karnataka Act No. 16 of 2013)

DECEMBER 2020: END SEMESTER ASSESSMENT (ESA) B TECH VI SEMESTER

UE18CS313 – Internet Of Things

Time: 3 Hrs	Answer All Questions	Max Marks: 100

1	a)	List and briefly explain current challenges being addressed by connected Roadways.	6
	b)	List the Core IoT Functional stack. Briefly explain any two core functional stack.	6
	c)	Highlight and briefly explain a few of the most significant challenges and problems that IoT is currently facing.	8
2	a)	List and briefly explain the Classes of Constrained Nodes as defined by RFC 7228.	6
	b)	List the use cases for the Narrowband Power Line Communications (NB-PLC).	6
	c)	What are the some advantages and disadvantages that a wireless-based solution offers?	8
3	a)	What is Adoption or Adaptation of the Internet Protocol?	6
	b)	Briefly explain three 6TiSCH forwarding models.	6
	c)	Define the following CoAP Message fields i. Options ii. Payload iii. Message ID iv. Code	8
4	a)	Explain "three Vs" to categorize big data.	6
	b)	With a neat block diagram illustrates the OCTAVE Allegro steps and phases.	6
	c)	List and explain four types of data analysis results.	8
5	a)	Write a program to print a temperature sensor value on serial monitor.	6
	b)	What is a Development Board?	6
	c)	What are the steps to setup RPi.	8