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Reg. No. : | | | | | | | | | | |

Question Paper Code: 96403

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2022

Sixth Semester

Electronics and Communication Engineering

19UEC603– INTERNET OF THINGS

(Regulation 2019)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. IoT can be represented as _____ CO1-U

   (a) network of physical objects embedded with sensors

   (b) network of virtual objects

   (c) network of objects in the ring structure

   (d) network of sensors

2. Which of the following is used to capture data from the physical world in IoT devices? CO1-U

   (a) Sensors (b) Actuators (c) Microprocessors (d) Microcontrollers

3. M2M stands for _____ CO1-U

   (a)Machine to Machine (b) Machine to Man (c) Man to Machine (d) All of the above

4. A hash function guarantees integrity of a message. It guarantees that message has not been CO1- U

   (a) Replaced (b) Overviewed (c) changed (d) Violated

5. The core element is operated by _____ CO1- U

   (a) PaaS (b) IoT service Provider (c) SaaS (d) IaaS

PART – B (5 x 3= 15 Marks)

6. State the characteristics of IoT CO1- U

7. Differentiate active and passive sensors with example. CO1- U

8. Examine whether M2M and IoT are same? CO1- U

9.		Why we need of IoT Security?	CO1- U	
10.		List out the applications of IoT.	CO1- U	

PART – C (5 x 16= 80 Marks)

11.	(a)	With neat sketch explain the Physical and Logical design of IoT.	CO1- U	(16)
		Or		
	(b)	Describe the various protocols used in IoT and also explain its different application.	CO1- U	(16)
12.	(a)	With neat sketch explain the function of Physical layer and MAC layer in IEEE 802.15.4.	CO1- U	(16)
		Or		
	(b)	Discuss in detail about the types of sensors for smart devices.	CO1- U	(16)
13.	(a)	Apply the knowledge of M2M to find the stress measurement.	CO2- Ana	(16)
		Or		
	(b)	Define various application areas of M2M and explain any one of it in detail.	CO2- Ana	(16)
14.	(a)	Analyze the threats related issues on different OSI layers of network.	CO4- Ana	(16)
		Or		
	(b)	Analyze the vulnerabilities of IoT and Illustrate with a specific case.	CO4- Ana	(16)
15.	(a)	Analyze various Business Model Scenarios for the Internet of Things with specific examples.	CO1- Ana	(16)
		Or		
	(b)	Design a model for city automation in IoT	CO1- App	(16)