Reg. No. :

**Question Paper Code: 96403** 

## B.E. / B.Tech. DEGREE EXAMINATION, NOV 2024

### Sixth Semester

**Electronics and Communication Engineering** 

#### 19UEC603- INTERNET OF THINGS

(Regulations 2019)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

#### PART A - $(5 \times 1 = 5 \text{ Marks})$

1.	will enable the humans to access, control and manage the operation.									
	(a) IoT	(b) Big data	(c) Networ	k	(d) Comm	unication				
2.	Which of the fo in IoT devices?	hich of the following is used to capture data from the physical world CO IoT devices?								
	(a) Sensors	(b) Actuators	(c) Microph	rocessors	(d) Microc	ontrollers				
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 CO1- U message has not been									
	(a) Replaced	(b) Overviewed	(c) changed	(d) Violat	ted					
5.	The core element	nt is operated by	-			CO1- U				
	(a) PaaS	(b) IoT service Provider	(c) SaaS	(	d) IaaS					
PART - B (5 x 3 = 15 Marks)										
6.	Determine the b	asic operations in 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?									
10.	List out the app	lications of IoT.				CO1- U				

# PART – C (5 x 16= 80 Marks)

11.	(a)	Apply the impact of the Internet of Things (IoT) in our daily lives with suitable example.	CO2- App	(16)
	(b)	Or Apply the concept of domain specific IoTs for any two domains.	CO2- App	(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. Or	CO2- Ana	(16)
	(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)
	(b)	Or Analyze the vulnerabilities of IoT and Illustrate with a specific case.	CO4- Ana	(16)
15.	(a)	Design a business model innovations for IoT Or	CO2- App	(16)
	(b)	Design a model for automotive applications in IoT	CO2- App	(16)