National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	Introduction to the Internet of Things	Course Code:	CS457
	Program:	Electrical Engineering	Semester:	Spring 2020
	Duration:	15 minutes	Total Marks:	25
	Exam Date:	11 February 2020	Weight:	3.33
	Section:	EE	Page(s):	2
	Exam Type:	Quiz-1 SOLUTION		

Student Name:_____ Roll No._____

Section:_____

Instruction/ Notes:	1. Do not forget to write your Name and Roll Numbers. 2. Solve on the paper and Return.

CLO 01: Define IOT and describe its evolution. Explain the idea, the vision, the challenges and the opportunities

Question No. 1

Marks: 25

Give short answers to the following questions in the space provided:

1. Give five synonyms for the Internet of Things (IOT).
a) Internet of Everything
b) Machine-to-Machine
c) Web of Things
d) Smart Object Networks
e) Pervasive Networks

2. Name five major areas leading up to today's Internet of Things.
a) Embedded Systems
b) Computer Networks/Data Communication Networks/Internet
c) Mobile Telephony/Cellular Communications/Cellular Networks
d) Telemetry
e) Wireless Sensor Networks
f) Ubiquitous and pervasive computing

3. Name five wireless connectivity standards that have been created for the IOT.
a) 6LoWPAN
b) ZigBee
c) WiFi/Wifi-HaLow/WiFi-HEW
d) Bluetooth/BLE/Bluetooth-Light/Bluetooth Smart

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e) Cellular Networks/LTE-M/NB-IOT/EC-GSM
f) Wireless Sensor Networks

4. Name any five major research challenges for the IOT.

a) Security and Privacy
b) Reliability and Dependability
c) Usability, Management, Interoperability
d) Software architecture
e) Information-centric Networking
f) Radio innovations
g) Testing and evaluation
h) Social, economic and policy issues
i) Education
j) Low Battery
k) Low Memory

5. Name five popular applications of the IOT.

a) Smart Grid
b) Smart Home
c) Smart City
d) Smart Wearables
e) Smart Healthcare/Patient Monitoring System
f) Industrial Internet of Things
g) Smart Farming/Smart Agriculture