C **Reg. No. :** | | | | | | | | | | |

Question Paper Code: 59210

B.E./B.Tech. DEGREE EXAMINATION, NOV 2018

Elective

Computer Science and Engineering

15UCS910 – BUILDING INTERNET OF THINGS

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. A wi-fi enabled device can be CO1- R

   (a) PC (b) Game console (c) Mobile phone (d) All of the above

2. Which one of the below instance are not a type of actuator CO2- R

   (a) An electric motor (b) A hydraulic system

   (c) A pneumatic system (d) Microphone

3. Information about an objects history is called_____ CO3- R

   (a) Object data (b) Event data (c) Security data (d) None of these

4. RFD stands for CO4- R

   (a) Reduced Function Devices (b) Reduced Field Devices

   (c) Reduced Functionality Devices (d) Reduced Functional Devices

5. _____ is the feature of cloud computing that allows the service to change in size or volume in order to meet a user's needs. CO5- R

   (a) Scalability (b) Virtualization (c) Security (d) Cost-savings

PART – B (5 x 3= 15Marks)

6. Define smart gateway. CO1- R

7. What is Software Agents? List out its properties. CO2- R

8.		Write short notes about Cluster Head election mechanism.	CO3- R	
9.		Mention the roles of Orchestrator nodes and Broker nodes.	CO4- R	
10.		Write short notes on open source e-Health sensor platform.	CO5- U	

PART – C (5 x 16= 80Marks)

11.	(a)	What is RFID and Explain its Applications.	CO1- U	(16)
		Or		
	(b)	How IOT components are Works. Explain in detail with an application.	CO1- U	(16)
12.	(a)	Explain about programming Languages for IoT. How to Choose it. Explain with an example.	CO2- U	(16)
		Or		
	(b)	What is sensors and actuators. What are the factors we need for choosing sensor and actuators?	CO2- U	(16)
13.	(a)	List out the types of network architecture and explain it each in detail.	CO3- U	(16)
		Or		
	(b)	Explain in detail about the Evolution from the RFID-based EPC Network to an Agent-based Internet of Things.	CO3- U	(16)
14.	(a)	Explain in detail about device integration discuss the ways to identify and address the discovered devices.	CO4- U	(16)
		Or		
	(b)	Discuss about application of Ontology Engineering in the Internet of Things.	CO4- U	(16)
15.	(a)	Explain the concepts of web enabling constrained devices with an example.	CO5 U	(16)
		Or		
	(b)	Explain about smart things and how to design RESTful Smartful Things.	CO5 U	(16)