Reg. No.:									
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Question Paper Code: 39211

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2019

Elective

Computer Science and Engineering

01UCS911 - INTERNET OF THINGS

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - $(10 \times 2 = 20 \text{ Marks})$

- 1. What is RFID?
- 2. Define Mobile Internet.
- 3. What is Arduino?
- 4. Explain the different modes of connecting IOT devices with internet.
- 5. What are software agents?
- 6. Write short note on EPC Networks.
- 7. Define Ontology.
- 8. Write short note on Ontology.
- 9. What is meant by content negotiation?
- 10. Write brief note on Web of Things.

PART - B (5 x 16 = 80 Marks)

11. (a) Explain the main concepts and essential things used in Internet of Things. (16)

	(b)	Explain in detail about the following communication technologies of IOT: (i) RFID (ii) Zigbee (iii) Wi-Fi and (iv) Mobile Internet. (16)					
12.	(a)	Explain the working principle of sensors and actuators. (16)					
		Or					
	(b)	(i) Briefly explain about how communication is achieved in IOT using Bluetooth and USB. (8)					
		(ii) Briefly explain the different types of languages supported by IOT. (8)					
13.	(a)	Explain the concepts and principles used in enabling autonomy and agility in Internation of Things.					
		Or					
	(b)	Explain the various technical requirements for satisfying the new demands in production. (16)					
14.	(a)	Explain the middleware technologies used in DiY Internet of Things for interoperability. (16)					
		Or					
	(b)	Briefly explain about the application of Ontology engineering in the internet of things. (16)					
15.	(a)	Explain in detail about the designing of RESTful smart things. (16)					
		Or					
	(b)	Explain how an automated elderly person monitoring platform is developed using Internet of Things. (16)					