SRI SAIRAM COLLEGE OF ENGINEERING

USN ☐☐☐☐☐☐☐☐☐☐ 15CS81

Eighth Semester B.E. Degree Examination, June/July 2019
Internet of Things Technology

Time: 3 hrs. Max. Marks: 80

Note: *Answer FIVE full questions, choosing one full question from each module.*

Module-1

1	a.	What is IOT? Explain in detail on Genesis of IOT.	(08 Marks)
	b.	What does IOT and digitaization mean? Elaborate on this concept.	(04 Marks)
	c.	Write a short note on "IOT impact in Real World".	(04 Marks)

OR

2	a.	Discuss IOT challenges.	(08 Marks)
	b.	With a neat diagram, explain architecture of IOT.	(04 Marks)
	c.	Explain Core IOT functional stack.	(04 Marks)

Module-2

3	a.	List and explain different types of sensors.	(08 Marks)
	b.	Elaborate on small physical objects and small virtual objects.	(04 Marks)
	c.	Explain "IOT Access Technologies".	(04 Marks)

OR

4	a.	Briefly explain protocol stack utilization IEEE 802.15.4.	(08 Marks)
	b.	What is SANET? Explain some advantages and disadvantages that a wireless based solution offers.	(08 Marks)

Module-3

5	a.	Explain working of IP as the IOT network layer.	(08 Marks)
	b.	Write note on Busines case for IP.	(04 Marks)
	c.	Discuss need for optimization.	(04 Marks)

OR

6	a.	Describe application protocols for IOT.	(08 Marks)
	b.	Discuss the various methods used in IOT application transport.	(08 Marks)

Module-4

7	a.	What do you mean by data and analytics for IOT? Explain.	(04 Marks)
	b.	Discuss Bigdata analyties tools and technology.	(04 Marks)
	c.	With a case study relate the concept of securing IOT.	(08 Marks)

OR

8	a.	Explain in detail how IT and OT security practices and systems vary in real time.	(08 Marks)
	b.	Discuss OCTAVE and FAIR formal risk analysis.	(08 Marks)

Module-5

9 a. Give a brief note on Arduino UNO.   **(04 Marks)**

    b. With a neat diagram, explain Raspberry P_i board.   **(04 Marks)**

    c. With a neat diagram, explain wireless temperature monitoring system using Raspberry P_i.   **(08 Marks)**

OR

10 a. Explain in detail smart city IOT architecture.   **(08 Marks)**

    b. With the case study explain smart and connected cities using Raspberry Pi.   **(08 Marks)**

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