Total Marks: 70

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII (NEW) EXAMINATION - WINTER 2018

Subject Code: 2180709	Date: 29/11/2018
Subject Name: Iot And Applications	

Time: 02:30 PM TO 05:00 PM **Instructions:**

1.	Attomat	~II	questions.
	Attenio	ж	anesmons.

- Attempt an questions.
 Make suitable assumptions wherever necessary.
 Figures to the right indicate full marks.

Q.1	(a) (b) (c)	What is M2M communication? Why M2M has shifted to the Internet of Things? What is Internet of Things? What are the applications of IoT? Explain the architecture of the Internet of Things.	03 04 07
Q.2	(a)	Which are the network and communication technologies can be used to implement an IoT application?	03
	(b)	What is a cloud? What is the role of cloud platforms in IoT?	04
	(c)	Explain reference model of Internet of Things. OR	07
	(c)	Which are Hardware and Software components of IoT? How do these components get synchronized in an IoT based application?	07
Q.3	(a)	What is the value chain of Internet of Things?	03
	(b)	What are data Accumulation and data Abstraction in a smart city application?	04
	(c)	What are the security and private issues of IoT? Explain using suitable case scenario.	07
		OR	
Q.3	(a)	Explain functional model of IoT.	03
	(b)	What is middleware? Explain GAMBAS adaptive middleware.	04
	(c)	Explain challenges of the Internet of Things.	07
Q.4	(a)	Differentiate M2M and IoT.	03
	(b)	What are the research issues of Internet of Things?	04
	(c)	Explain smart parking system with architecture of system.	07
		OR	
Q.4	(a)	Explain IoT domain model.	03
	(b)	What are Big data and Big data analytics? How the data captured by an IoT system can be analyzed?	04
	(c)	Which is a smart city? What are the features of IoT based smart city? Explain role of IoT in making smart city.	07
Q.5	(a)	What is FP7 projects? How these projects are helpful in Implementing IoT systems?	03
	(b)	What is smart Health? Discuss use of IoT in smart health using all use cases of the health industry.	04
	(c)	What is a smart home? What are the functions of IoT based smart home? Which sensors are required to make smart home?	07
		OR	
Q.5	(a)	What are the governance issues of Internet of Things?	03
V.	(b)	How does an Internet of Things conserve the electric energy? Discuss with a suitable	03
		case scenario.	U - T
	(c)	What is smart application? How Oil and Gas Industry can be smart using an Internet of Things? Take all possible use cases of Oil and Gas industry into consideration.	07
