

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII (NEW) EXAMINATION – WINTER 2017

Subject Code: 2180709

Date: 07/11/2017

Subject Name: IOT and Applications (Departmental Elective - III)

Time: 02:30 PM TO 05:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS	
Q.1	(a) Explain issues of IOT.	03	
	(b) Define IOT. Explain reasons to converge the technologies and shift to IOT.	04	
	(c) Explain research directions of IOT.	07	
Q.2	(a) Define M2M. Explain reasons of shifting from M2M to IoT.	03	
	(b) Explain IOT Value Chains using figure.	04	
	(c) Explain layered IOT architecture using figure.	07	
OR			
Q.3	(c) Explain Main design principles and needed capabilities of IOT.	07	
	(a) Explain smart parking IOT application using figure.	03	
	(b) Explain reference architecture of IOT using figure.	04	
Q.3	(c) Explain Functional View, Information View, Deployment and Operational View, Other Relevant architectural views of IOT reference architecture.	07	
	OR		
	Q.3	(a) Explain smart home IOT application using figure.	03
(b) Explain Architecture Reference Model of IOT using figure.		04	
(c) Explain I-GVC using figure.		07	
Q.4	(a) Enlist IoT Applications for Value Creations.	03	
	(b) Explain needs of IoT for Oil and Gas Industry.	04	
	(c) Explain value creation from big data and serialization.	07	
OR			
Q.4	(a) Enlist challenges faced by industry related IoT Applications.	03	
	(b) Explain four Aspects in one's business to master IoT.	04	
	(c) Explain eHealth IOT applications.	07	
Q.5	(a) Data aggregation for the IoT in smart cities security.	03	
	(b) Explain contributions from FP7 Projects.	04	
	(c) Explain security, privacy and trust in IoT-data-platforms for smart cities.	07	
OR			
Q.5	(a) Explain security concerns for smart home application.	03	

- (b) Explain smartie approach, properties and characteristics. **04**
- (c) Explain security concerns for industry. **07**