C.U.SHAH UNIVERSITY
Summer Examination-2017

Subject Name: Internet of Things and Embedded System

Subject Code: 4TE08ITE1   **Branch: B.Tech (CE,IT)**

Semester: 8   **Date: 15/04/2017**   **Time: 02:30 To 05:30**   **Marks: 70**

Instructions:
 (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 (2) Instructions written on main answer book are strictly to be obeyed.
 (3) Draw neat diagrams and figures (if necessary) at right places.
 (4) Assume suitable data if needed.

Q-1   **Attempt the following questions:**   **(14)**

a) Which is not a part of information value loop?

   1) Create 2) Communicate 3) Aggregate 4) Transform

b) Which is a type of Sensor?

   1) Active 2) Nested 3)Pure 4)Range

c) Which one is a Wide Area Network technology ?

   1) Ethernet 2) Wi-Fi 3)Bluetooth 4) 4G

d) What is A in LTE-A?

   1) Active 2) Anchor 3) Advanced 4) Arduino

e) What is "E" in ETL aggregation method?

   1) Effect 2) Extraction 3)Endure 4)Enlarge

f) What is 'M' in M2H?

   1) Man 2) Machine 3) Matrix 4) Maker

g) 'Map-Reduce' is part of which technology?

   1) Big-data 2) Python 3) Serial Algorithm 4) Surface Computing

h) How many Pins does Uno-Arduino board have?

    1)   10   2) 09   3) 06   4)13

i) How many arguments does pin Mode take?

    1)   01   2) 0   3) 02   4)03

j)
Which one is not a part of 4Ps in Project Management?

    1) People 2) Product 3)Project 4)Pinnacle

k) What is "J" in JSON?

    1) Java   2) Jade   3) Junk   4)Joint

l) XML is a _____ Language.

    1) Scripting   2) Markup 3) High Level 4) Low-level

m) Define Internet of Things.

n) Define Augmented Intelligence.

Attempt any four questions from Q-2 to Q-8

Q-2	**Attempt all questions**	**(14)**
a)	What are Different Components of Internet of Things?	
b)	Explain ETL in the context of data aggregation standards.	

Q-3	**Attempt all questions**	**(14)**
a)	What is Artificial Intelligence? Explain	
b)	Explain Predictive and Prescriptive Analytics.	

Q-4	**Attempt all questions**	**(14)**
a)	Explain Arduino Programming with example.	
b)	Describe working examples of Internet of Things.	

Q-5	**Attempt all questions**	**(14)**
a)	Explain in detail the XML format.	
b)	What are the three levels of user design? Explain in detail.	

Q-6	**Attempt all questions**	**(14)**
a)	Explain Web API with examples.	
b)	What are the components of XML?	

Q-7   **Attempt all questions**   **(14)**
- **a)** What are key steps in Project Planning?
- **b)** Which 'P' among 4Ps is the most important and why?

Q-8   **Attempt all questions**   **(14)**
- **a)** What are the challenges for Internet of Things Technology?
- **b)** What are the major issues for the Sensor Technology?