Enrollment No: _____ Exam Seat No:_____

C. U. SHAH UNIVERSITY

Summer Examination-2022

Subject Name: Internet of Things and Embedded System

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

Semester: 8 **Date: 04/05/2022** **Time: 11:00 To 02:00** **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) What is JSON? (01)
b) What is batch processing? (01)
c) Define metadata. (01)
d) What is sketch? (01)
e) Explain cognitive technologies (01)
f) What is the purpose of void_setup()? (01)
g) List down advantage of good design. (01)
h) Why API is used? (01)
i) What is pin mode function? (01)
j) List down examples of IOT. (01)
k) Why JSON is important? (01)
l) List down different component of IOT. (01)
m) Explain Embedded system. (01)
n) Explain RFID (01)

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

Q-2 **Attempt all questions** **(14)**

(a) Explain Information value loop in detail with neat diagram. (07)
(b) Explain IOT Protocol in brief. (04)
(c) What is AI explain in detail? (03)

Q-3 **Attempt all questions** **(14)**

(a) Write down working of sensor in detail and explain different types of sensor in detail. (07)
(b) Explain M2M machine to machine and M2H machine to human interface in detail. (04)
(c) What is the role standard play in IOT? (03)

Q-4		**Attempt all questions**	**(14)**
	(a)	Explain W5H2 principal in detail.	(07)
	(b)	Give your views about the trust of people in IoT data platform.	(04)
	(c)	Explain the structure of Arduino programming.	(03)
Q-5		**Attempt all questions**	**(14)**
	(a)	What is prototyping? Explain different types of prototyping.	(07)
	(b)	Write a brief note on IOT security.	(04)
	(c)	Difference between JSON and XML. Which one is better?	(03)
Q-6		**Attempt all questions**	**(14)**
	(a)	Describe XML DTDs in detail with a appropriate example.	(07)
	(b)	How augmented Intelligence helps to create IOT system?	(04)
	(c)	Explain key steps in project planning.	(03)
Q-7		**Attempt all questions**	**(14)**
	(a)	Explain XML Schema in detail with appropriate example.	(07)
	(b)	Write any code in arduino programming and explain in detail.	(04)
	(c)	Explain Visceral design.	(03)
Q-8		**Attempt all questions**	**(14)**
	(a)	Explain 4 P's of Management.	(07)
	(b)	What is agile team?	(04)
	(c)	How much does people matter in software project.	(03)