Name: Student University Roll No.:	Printed Pages: 1

School of Engineering
First Sessional Examination, Odd Semester (AS: 2023-24)
B. Tech:CSE(IOTBC)
Year:2ND Semester:3RD

Course Title: Internet of things Application development **Course Code:** ITBC3301	**M.M.: 30** **Time: 1 *hr***

Instructions if any: Read the question Carefully.

	SECTION 'A' **Q.N.1. Attempt all parts of the following:**	**Course Objective**	**Marks**
a)	What is the importance of data processing and storage in IoT?	CO1	1
b)	What is the primary characteristic of analog sensors in IoT?	CO2	1
c)	How does IoT contribute to "efficient resource utilization"?	CO1	1
d)	What are some real-world applications of IoT in smart cities?	CO1	1
e)	What distinguishes digital sensors from analog sensors in IoT?	CO2	1
	SECTION 'B' **Q.N.2. Attempt any two parts of the following:**	**Course Objective**	**Marks**
a)	How do thermal actuators, like shape memory alloys (SMAs), function in IoT applications?	CO2	7.5
b)	Why is sensing in IoT considered fundamental to its functionality and applications?	CO1	7.5
c)	What does "self-adapting" and "self-configuring" mean in the context of IoT devices?	CO1	7.5
d)	Why is sensing in IoT considered fundamental to its functionality and applications?	CO1	7.5
	SECTION 'C' **Q.N.3. Attempt any one part of the following**	**Course Objective**	**Marks**
a)	Difference between sensor and actuator	CO2	10
b)	What is "Denial of Service (DoS)" and how does a "Distributed Denial of Service (DDoS)" attack differ from a traditional DoS attack?	CO1	10
c)	What is the role of "authentication", "access control" ,"data security" and "non-repudiation" in IoT security?	CO1	10

Table 1: Mapping between COs and questions

(Number of COs may vary from course to course)

COs	Questions Numbers	Total Marks
CO1	1(a) , 1(c), 1(d) , 2(b) , 2(c) , 2(d),3(b), 3(c)	45.5
CO2	1(b) ,1(e) , 2(a) , 3(a)	19.5