Enrolment ID _____

NAVRACHANA UNIVERSITY
a UGC recognized University

School: School of Engineering and Technology
Program: BTech-Electrical & Electronics Engineering
Year: 3rd **Semester:** 6th
Examination: End Semester Examination
Examination year: May – 2023

Course Code: EE328	**Course Name:** Fundamentals of Internet of Things	
Date:	19/05/2023	**Marks:** 40
Time:	11:30 AM to 01:30 PM	**Total Pages:** 1

Instructions for students:
1. This question paper consists of three main questions with their associated sub-questions
2. Write answers for questions belonging to same question/sub-question together. Do not answer questions haphazardly
3. Manage time effectively during examination so that paper is completed in specified duration

Q 1. Match the most appropriate answer on the right with the keyword on the left: [1 mark each] **(10)**

	Keyword		Answer	CO	BT
1.	Control unit	a.	Business model	CO1	1,2
2.	Synchronization and acknowledgement	b.	Data at rest	CO1, CO2	1,2,3
3.	ICMP	c.	DODAG	CO1, CO2, CO3	1,2,3
4.	Conceptual structure showing business viability	d.	Gateway	CO4	1,2
5.	CoAP	e.	Security protocol	CO5	1,2
6.	Device layer	f.	Part of SoC	CO6	1,2
7.	DTLS	g.	TCP	CO3, CO4	1,2,3
8.	Discovery	h.	Constrained enviornment	CO5	1,2
9.	Data in cloud	i.	Link failure information	CO6	1,2
10.	CORPL	j.	Service layer – one M2M	CO4, CO5	1,2,3

Q 2	**Answer in Detail: (Any 3) [10 marks each]** **(30)**	CO	BT
1.	Explain the 6LowPAN protocol and its relation to IPV6 protocol and IoT.	CO4, CO3	1,2,3
2.	What are the security vulnerabilities that IoT applications face? Elicit the threats that arise at each layer of the OSI / architectural model for IoT.	CO7	1,2,3
3.	How is data representation and visualization done for big data obtained from IoT applications? Explain in detail.	CO1, CO2,CO3	1,2,3
4.	Explain in detail the architectural model for IoT with all the layers incorporated.	CO1	1,2,3
5.	Explain in detail any one transport layer protocol for IoT.	CO6	1,2,3

End of Question Paper

All the Best