

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE(MINOR) - SEMESTER-VI EXAMINATION – SUMMER 2023

Subject Code:116AI01

Date:10-08-2023

Subject Name:IoT Networking technologies and Security

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.
4. Simple and non-programmable scientific calculators are allowed.

	Marks
Q.1 (a) Explain the life cycle of Internet of things.	03
(b) Which are the Challenges or Risks Associated with IOT?	04
(c) Which are the key Characteristic of IOT?	07
Q.2 (a) Explain Message queuing technology transport protocol.	03
(b) Differentiate IPv4 and IPv6.	04
(c) Explain the Classification of IOT protocol in detail.	07
OR	
(c) Explain various security issues regarding IOT and needs in detail.	07
Q.3 (a) How can IOT benefit the Healthcare Industry?	03
(b) What is meant by Smart City in IOT?	04
(c) How IOT is used in Healthcare System?	07
OR	
Q.3 (a) What are different types of Sensors in IOT?	03
(b) What would happens if our “smart” system was compromised?	04
(c) What are the possible attacks on IOT devices?	07
Q.4 (a) What is Software Defined Network?	03
(b) Differentiate Software Defined Networking and Traditional Networking.	04
(c) Discuss the Risks, Challenges and Potential solution for the software defined network.	07
OR	
Q.4 (a) Explain Data Plane and Control Plane in SDN.	03
(b) Discuss Merit and Demerits of Software Defined Network.	04
(c) Explain SDN Architecture in detail.	07
Q.5 (a) What are the Platform Components of CPS?	03
(b) Differentiate CPS and IOT.	04
(c) What are the main challenges in designing and implementing Cyber Physical System?	07
OR	
Q.5 (a) Differentiate TCP and UDP.	03
(b) What are the challenges to develop a CPS system?	04
(c) Which are the different phase roadmap to Secure CPS.	07
