

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER- VI EXAMINATION – SUMMER 2026

Subject Code:3161716

Date:29-05-2026

Subject Name:Industry 4.0

Time:10:30 AM TO 01:00 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) List the various industry revolution.	03
	(b) Explain about digitalization.	04
	(c) Explain in details about drivers, enablers and compelling forces for industry 4.0.	07
Q.2	(a) Write about networked economy in industry 4.0.	03
	(b) Discuss the challenges for industry 4.0.	04
	(c) Explain in detail about trends of industrial big data and predictive analytics for smart business transformation.	07
	OR	
	(c) Discuss about IIoT and its advantages, disadvantages, application and issues.	07
Q.3	(a) What is cloud computing? Write different types of connection with cloud.	03
	(b) How Help full the Harnessing and Sharing Knowledge in organizations?	04
	(c) Discuss about IoT and its advantages, disadvantages, application and issues.	07
	OR	
Q.3	(a) Draw neat reference architecture model for industry 4.0.	03
	(b) List the smart devices and explain it.	04
	(c) Draw the OSI model of communication. Discuss about SCADA and machine to machine communication in industry 4.0.	07
Q.4	(a) Draw the automation pyramid for smart manufacturing.	03
	(b) Discuss in detail about smart cities with example.	04
	(c) Draw and discuss about cyber physical system architecture with its benefits.	07
	OR	
Q.4	(a) Define the term big data in industry 4.0	03
	(b) Discuss in details about smart logistics with example.	04
	(c) What is mobile computing? Discuss about evolution of mobile computing in industry 4.0.	07
Q.5	(a) List the types of cyber-crime.	03
	(b) Explain robotic automation with suitable example.	04
	(c) List the communication protocols for IoT. Explain about, how financial cybercrime group is organized?	07
	OR	
Q.5	(a) Write about data encryption.	03
	(b) Discuss about Data value and data governance.	04
	(c) What is data classification? Write in detail about dimensions of data.	07
