

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) EXAMINATION – SUMMER 2021****Subject Code:2160208****Date:04/08/2021****Subject Name:Automotive computer controlled Systems****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.

		MARKS
Q.1	(a) List various Logic gates along with symbols and truth tables.	03
	(b) Explain types of computer memories.	04
	(c) Explain Evaporative emission control system with Schematic diagram.	07
Q.2	(a) Describe Variable Capacitance type sensor.	03
	(b) Explain Digital Multi-meter in brief.	04
	(c) Write short note on Exhaust Gas Recirculation (EGR) system with neat sketch.	07
OR		
	(c) Explain Traction Control System with diagram.	07
Q.3	(a) Explain Stepper motor operated Valve.	03
	(b) State various precautions while working with computer controlled systems.	04
	(c) Explain Digital to Analog and Analog to Digital Conversion.	07
OR		
Q.3	(a) Describe Liquid Crystal Displays.	03
	(b) Explain piezoelectric sensor.	04
	(c) Describe importance of sensors. Explain Oxygen sensor.	07
Q.4	(a) Discuss Manifold Absolute Pressure sensor.	03
	(b) Explain Coded ignition Key.	04
	(c) Describe Stability control system with line diagram.	07
OR		
Q.4	(a) Explain Oscilloscope in brief	03
	(b) Write short note on Injector tests	04
	(c) What are Diagnostics troubles codes? Explain with suitable examples.	07
Q.5	(a) Discuss Supplementary Restraint System.	03
	(b) Explain electromagnetic sensors with their application in automobile.	04
	(c) Explain Computer controlled Diesel engine system.	07
OR		
Q.5	(a) Draw schematic diagram of electronic ignition system.	03
	(b) What is duty cycle? Explain with proper example.	04
	(c) With neat sketch explain vehicle air conditioning system.	07
