

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2018**

**Subject Code:2160208**

**Date:01/05/2018**

**Subject Name:Automotive computer controlled Systems**

**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.

	<b>MARKS</b>
<b>Q.1</b> (a) Explain types of computer memories.	<b>03</b>
(b) Explain Digital Multi-meter.	<b>04</b>
(c) Explain traction control system.	<b>07</b>
<b>Q.2</b> (a) Explain ABS System.	<b>03</b>
(b) List the logical gate with its figure.	<b>04</b>
(c) Write a short note on computer controlled fuel injection system.	<b>07</b>
<b>OR</b>	
(c) Explain solenoid-operated valve.	<b>07</b>
<b>Q.3</b> (a) What are the fundamental parts of computer? Give its application.	<b>03</b>
(b) Write a short note on Analogue to digital conversion.	<b>04</b>
(c) Write a short note on LCD and LED display.	<b>07</b>
<b>OR</b>	
<b>Q.3</b> (a) Explain variable capacitance sensors.	<b>03</b>
(b) What are the practical importance of sensors?	<b>04</b>
(c) Explain on board diagnostic – II (OBD-II) tools.	<b>07</b>
<b>Q.4</b> (a) List out Diagnostic tools that connect to ECM.	<b>03</b>
(b) Explain Exhaust Gas Recirculation (EGR) system with neat sketch.	<b>04</b>
(c) Explain coded ignition key system.	<b>07</b>
<b>OR</b>	
<b>Q.4</b> (a) Explain Flip-Flop Circuit.	<b>03</b>
(b) Write short note on operation of Actuators.	<b>04</b>
(c) Explain supplementary restraint system (SRS).	<b>07</b>
<b>Q.5</b> (a) What are the application of Oscilloscope?	<b>03</b>
(b) Explain Oxygen sensor.	<b>04</b>
(c) Explain Optical sensors and Piezoelectric sensors.	<b>07</b>
<b>OR</b>	
<b>Q.5</b> (a) Where & Why we used temperature sensors in Automobile?	<b>03</b>
(b) List precaution when working with computer control system.	<b>04</b>
(c) With neat sketch explain vehicle Air conditioning system.	<b>07</b>

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