

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) EXAMINATION – WINTER 2023

Subject Code:3160209

Date:02-12-2023

Subject Name:Automotive Electricals and Electronics

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.

- Q 1** (A) Justify the need of fog lamp 03
(B) Explain plug fouling. 04
(C) Explain color coding of wiring system 07
- Q 2** (A) Draw layout of wiring diagram of four wheeler vehicle 03
(B) Explain parking brake indicator 04
(C) Explain Central Locking system 07
- OR**
- (C) Describe about two filament modern head light. 07
- Q 3** (A) Brief about instrument panel lights 03
(B) Explain Throttle position sensors 04
(C) Explain bendix drive types of drive mechanism 07
- OR**
- Q 3** (A) Justify the need of alternator 03
(B) Describe Fuel metering sensor 04
(C) Explain the working of windscreen wiper 07
- Q 4** (A) Describe Feedback carburetor systems (FBC) 03
(B) Describe Crank Angle Position Sensors with Neat Sketch. 04
(C) Explain Different Types of Battery Charging Technic 07
- OR**
- Q 4** (A) Why diesel engine required high ampere battery? 03
(B) Explain Throttle position sensors, 04
(C) Explain electronic horn with Neat Sketch. 07
- Q 5** (A) Explain Oxygen Sensors. 03
(B) Explain Electromagnetic interference Suppression 04
(C) Explain cold starting devices: Glow plug & choke 07
- OR**
- Q 5** (A) Explain Cam angle RPM Testers used as Testing Devices in Vehicles. 03
(B) Explain Spark Advance Mechanism and Cam Angle in Ignition System. 04
(C) Explain Electronic spark timing control 07
