

GUJARAT TECHNOLOGICAL UNIVERSITY**BE SEM-VIII Examination May 2012****Subject code: 180202****Subject Name: Automotive Electrical & Electronics****Date: 10/05/2012****Time: 10.30 am – 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.**

- Q.1** (a) Explain Starting system and Ignition system of Vehicle. **07**
(b) Explain Positive and Negative earthing. **07**
- Q.2** (a) Explain lead acid battery construction with neat sketch. **07**
(b) Explain the various battery tests. **07**
- OR**
- (b) Explain battery failures. **07**
- Q.3** (a) Explain Armature reaction and Third brush regulation in generator. **07**
(b) What is a compensated voltage control regulator? Explain it with the help of a neat circuit diagram. **07**
- OR**
- Q.3** (a) Explain Bendix drive cranking motor. **07**
(b) Explain the constructional details of distributors with magnetic pick-ups. **07**
- Q.4** (a) Explain the ideal spark plug characteristics. **07**
(b) Describe with the help of a neat sketch the constructional details of headlight. **07**
- OR**
- Q.4** (a) Explain fuel gauge with neat circuit diagram. **07**
(b) Explain windscreen wiper. **07**
- Q.5** (a) Explain ignition coil tester. **07**
(b) Explain timing devices. **07**
- OR**
- Q.5** (a) Define cable colour code and classify the automobile cables. **07**
(b) Explain air conditioning and heating procedure in vehicle. **07**
