

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.VOC. –SEMESTER 1(NEW SYLLABUS) EXAMINATION- WINTER 2018

Subject Code: 1110102

Date: 17-01-2019

Subject Name: Automobile Electrical Equipment

Time: 10:30 AM to 12:30 PM

Total Marks: 50

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What do you mean by wiring harness? **03**
(b) What do you mean by voltage regulator? **02**
(c) Compare DC Generator & Alternator. **05**
- Q.2** (a) Draw neat labelled diagram of lead acid battery. **05**
(b) What do you mean by Regulator? Brief about current and voltage regulator, **05**
- OR**
- (b) Compare DC Generator Regulator & Alternator Regulator **05**
- Q.3** (a) Brief each cable (a) starting systems cables, (b) general purpose cables **05**
(c) high-tension cables
(b) Why negative earthing is preferred over Positive earthing? **03**
(c) List out different parts of DC generator **02**
- OR**
- Q.3** (a) Brief need of each (a) Cable connectors, (b) circuit breakers, (c) plastic fibre-optic wires, (d) printed circuits. (e) Fuses in circuits. **05**
(b) Explain Earth-return systems in wiring **03**
(c) Why automobile required DC generator Charging system? **02**
- Q.4** (a) Explain the principle, construction & working of a lead acid battery. **05**
(b) How hydrometer is used to measure specific gravity of electrolyte **03**
(c) Enlist types of alternator. **02**
- OR**
- Q.4** (a) Explain the principle, construction & working of a alkaline battery. **05**
(b) Why is battery cells connected in series or parallel? **03**
(c) Need of Commutation after alternator? **02**
- Q.5** (a) Explain the principle, Construction and working of DC generator. **05**
(b) Explain the principle, Construction and working of alternator. **05**
- OR**
- Q.5** (a) Write short note on Armature Reaction **05**
(b) Explain different types of regulators for alternator. **05**
