



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examinations (December 2019)

School: School of Engineering

Program: M.Tech-APE

Course: Automotive Electrical and Electronics System Design Course Code: APE 601

Semester: III

Max Marks: 40

Duration (mins): 90

Answer the questions [Any FOUR]

Q1. Write Short notes (ANY TWO) [10]
(Each question carries 5 marks)

- a) Charging system and Vehicle starting system,
- b) Lightening system and accessories,
- c) Point fuel injection system and Injection system control.

Q2. Explain the working of the following (ANY TWO) [10]
(Each question carries 5 marks)

- a) Starter motor
- b) Alternator and Synchronous motor.
- c) Electrical braking

Q3. Answer the following Questions (ANY TWO) [10]
(Each question carries 5 marks)

- a) Explain taxonomy of Auxiliary Electrical Systems with a block diagram.
- b) Explain various security systems in automotive system.
- c) Explain the operation of any one type of Single phase Induction motor.

Q4. Explain the Ignition system? What are the requirements of ignition system. Explain the different types of ignition system. [10]

Q5. Explain the different types of battery systems used in Automotive Products as well as discuss on various emerging battery systems. [10]
