

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
Diploma Engineering, Mid semester Examination

Semester: 5th

Subject Code: (03612307)

Subject Name: (FUNDAMENTAL OF ELECTRIC VEHICLE)

Date: (10/08/2022)

Time: (1hr: 30min)

Total Marks: 40

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

Q.1 Answer any six out of Ten. (2 Marks Each) (12)

1. Which types of vehicles give zero emission?
2. Define Air Pollution?
3. How much lighter of electric vehicles than I.C engine?
4. Which types of vehicles dominated in Indian Market?
5. What is Automobile vehicle pollution?
6. How to find Electric vehicle torque?
7. Assume a vehicle has radius of the wheel of 0.3 m. Convert speeds of 1000 rpm into kmph.
8. Li- ion Energy Density is _____
9. What is the concept of battery swapping?
10. What is petrol energy Density ?

Q.2 A) What is Air Pollution? (03)

OR

A) What is battery swapping? (03)

B) What Are The Sources Of Pollutants From Gasoline Engine ? (03)

OR

B) What are the reasons of NOX production in Gasoline operated Vehicles and its effects of on Environment? (03)

C) Draw the Different Configurations of Electric Vehicles (04)

OR

C) What are the sources of production of Sulphur dioxide and Particulates in Gasoline operated Vehicles and its effects of on Environment? (04)

D) What is motor vehicle pollution? (04)

Q.3 A) How the battery swapping technology works ? (03)

OR

A) What is the Scenario of Electric Vehicle in India? (03)

B) How Air Pollution from Automobiles Can be Controlled? (03)

OR

B) What are the Problems in switching to Electric Vehicle? (03)

C) In History of Automobile, when the end of the Golden Age of electric-powered cars ? (04)

OR

C) Explain Configurations of Electric Vehicles. (04)

D) What is Electric Vehicle? (04)

