

April 2024

Time – Three hours
(Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART – A

1. What is front wheel drive?
2. Write about HEV.
3. Write about speed ratio.
4. Mention any three applications of BLDC motor.
5. What is battery management system?
6. What is the impact of EV on power grid?
7. What are the advantages of EV Eco system?
8. Write about key performance indicator.
9. What is the impact of the policy measures in the area of electric cars and two wheelers?
10. Write about the initiatives of the charging Infrastructure.

[Turn over.....

PART – B

11. (a) Explain any two drive train system in a conventional vehicle.
(Or)
(b) Explain PHEV with block diagram. State its advantages and disadvantages.
12. (a) Explain the configurations of Electric Vehicle.
(Or)
(b) Explain about hub motor drive with neat sketch.
13. (a) Explain the construction and working of Nickel Cadmium battery.
(Or)
(b) Explain the various impacts of EV.
14. (a) Explain about the FAME –I guidelines in India.
(Or)
(b) (i) Explain EV eco system in Tamilnadu. (7)
(ii) Explain Global impacts on electric mobility. (7)
15. (a) Explain about the requirements of E-vehicle policy 2019.
(Or)
(b) (i) Explain Re cycling eco system for batteries and EV's. (7)
(ii) Explain capacity building and charging structure of EV. (7)
