

Register No.: **952****October 2023**

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 rear wheel drive?
2. Write about the FECV.
3. Write about the tractive vehicle.
4. List the demerits of BLDC motor drive.
5. Mention the types of batteries.
6. What are the effects of EV?
7. Write briefly about the electric mobility in India.
8. What is the global impact of EV policy?
9. What is the impact of the policy measures in the area of electric cars?
10. Write about the recycling eco system.

[Turn over.....]

PART - B

11. (a) Write short notes on (i) Rear wheel drive (ii) All wheel drive.
(Or)
(b) Explain the working of plug-in Hybrid electric vehicle with the block diagram.
12. (a) Explain the tractive effort in normal driving environment.
(Or)
(b) Explain the working principle of permanent magnetic brush less DC motor drive. Also mention its merits and demerits.
13. (a) Explain about the role of battery management system.
(Or)
(b) Explain the battery charging techniques.
14. (a) Explain the EV ecosystem in India.
(Or)
(b) Explain the trends and future development in Electric mobility.
15. (a) Explain the policy measures taken by Government of Tamil Nadu to encourage manufacturing and marketing EV.
(Or)
(b) Explain the initiative of research and development and business incubation in the EV policy 2019.
