



**K. K. Wagh Institute of Engineering Education & Research, Nashik**  
(An Autonomous Institute From A.Y. 2022-23)

InSem Examination-II Summer2025	
Exam Seat No.:	
Academic Year:2024-2025	Semester: VI
Class: TY	Program: B.Tech
Branch Code: MEC	Pattern: 2022
Name of Course: Introduction to Electric Vehicles	Course Code:MEC223021
Max. Marks:30	Duration:1:15 Hrs.

**Instructions:** Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains 01 page(s).
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.

**Marks CO**

**Question No. 1**

- 1 a) Explain various key components used in electric vehicles with neat sketch. (7) CO1

**Question No. 2**

- 2 a) Explain with neat sketch any two motors used in Electric Vehicles. (8) CO1

**OR**

- 2 b) List various transmission couplings used in Hybrid Electric vehicle. Explain speed coupling in detail with neat sketch. (8) CO1

**Question No. 3**

- 3 a) Discuss in detail the policies initiated by Indian government to promote electric vehicles. (7) CO2

**Question No. 4**

- 4 a) Discuss the methodology of well to wheel analysis of electric vehicles with some suitable example and data? (8) CO2

**OR**

- 4 b) Discuss the typical two wheel and four wheel electric vehicles available in India with the typical consumer subsidy available for different models. (8) CO2

..... End of question paper.....