


Name: Enrolment No:			
<p style="text-align: center;">UPES End Semester Examination, May 2025</p> <p> Course: Two & Three Wheelers Technology Program: B.Tech ADE Course Code: MEAD3039 </p> <p style="text-align: right;"> Semester: VI Time : 03 hrs. Max. Marks: 100 </p> <p>Instructions: All the questions are compulsory.</p>			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	Classify different types of fairings and describe their practical applications in vehicles.	4	CO1
Q 2	Describe the function of a swing arm and its significance in vehicle suspension systems.	4	CO1
Q 3	Explain the different types of fairings and their specific applications in vehicles.	4	CO1
Q 4	Define the Trellis Frame and describe its structure and use in vehicle design.	4	CO1
Q 5	Describe the role and applications of dampers in automotive or mechanical systems.	4	CO1
SECTION B (4Qx10M= 40 Marks)			
Q 6	Identify the causes of misfires in internal combustion engines and their impact on performance.	10	CO2
Q 7	Describe the frame layout used in three-wheeler vehicles and its significance.	10	CO2
Q 8	Compare different parallel twin engine configurations, discussing their advantages and limitations.	10	CO2
Q 9	Evaluate the feasibility of hybridization mechanisms in two-wheelers. OR Explain the mid-drive motor mechanism in two-wheelers, supported by a simple diagram.	10	CO2
SECTION-C (2Qx20M=40 Marks)			
Q 10	Describe the frame layout used in three-wheeler vehicles and its significance. OR Compare different parallel twin engine configurations, discussing their advantages and limitations.	20	CO3

Q 11	Explain the mid-drive motor mechanism in two-wheelers, supported by a simple diagram.	20	CO3
------	---	-----------	------------