

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

END Semester Examination, December 2021

Programme Name: B.Tech- ADE

Semester : VII

Course Name : Transportation Design & Development

Time : 03 hrs.

Course Code : MEAD3008P

Max. Marks: 100

Nos. of page(s) : 2

Instructions:

- i. There are three sections viz. Section A, Section B and Section C. Section A carries 20 marks, Section B carries 40 marks and Section C carries 30 marks
- ii. Attempt all the questions in Section A, B and C
- iii. Make appropriate assumptions wherever required

SECTION A – 20 Marks

S. No.		Marks	CO
Q 1	Describe Transportation design and major contributing areas in automobile.	4	CO1
Q 2	Describe relation between design and styling.	4	CO1
Q 3	Describe 'User survey' in transportation design.	4	CO2
Q.4	Describe relation between Design and Ergonomics in Transportation Design.	4	CO2
Q.5	Describe role of digital modeling in transportation design.	4	CO2

SECTION B-40 Marks

Q 6	Describe Design process followed I transportation Design. Design an alloy wheel rim by drawing and show incorporation of innovation and function.	10	CO1
Q 7	Describe Kansei Engineering and show with drawing different benefits that can be achieved by using this principle.	10	CO2
Q.8	Illustrate with drawing the ergonomic factors involved in Car seat design.	10	CO2
Q.9	Describe Metaphor in Design. Describe how metaphor in design can be used for problem solving.	10	CO2

SECTION C (40 Marks)

Q 10	Use the principles of design and draw an exterior design for a city car for 2030. Explain design features and how it will work.	20	CO2
Q. 11	Describe Moodboard in design. Draw a car using moodboard. OR Describe Biomimicry. Use Biomimicry and design exterior shape of an electric car.	20	CO3