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Question Paper Code	13690
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M.E - DEGREE EXAMINATIONS, APRIL / MAY 2025

Second Semester

Industrial Safety Engineering

24PISEL201– TRANSPORT SAFETY

Regulation - 2024

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

- | | <i>Marks</i> | <i>K – Level</i> | <i>CO</i> |
|--|--------------|------------------|-----------|
| 1. State the importance of the transport emergency card. | 2 | K1 | CO1 |
| 2. Write the leading causes of road accidents. | 2 | K1 | CO1 |
| 3. Write down the key factors contributing to pedestrian safety. | 2 | K1 | CO2 |
| 4. State the psychological factors affecting driver behavior and safety. | 2 | K2 | CO2 |
| 5. Define defensive driving. | 2 | K1 | CO3 |
| 6. Describe the purpose of traffic signs and signals. | 2 | K2 | CO3 |
| 7. Define noise pollution. | 2 | K1 | CO4 |
| 8. Identify the cause of accidents by pedestrians. | 2 | K2 | CO4 |
| 9. Define Chicane. | 2 | K1 | CO5 |
| 10. List the disadvantages of one-way streets. | 2 | K1 | CO5 |

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

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|--|----|----|-----|
| 11. a) Discuss the liability issues and legal implications for stakeholders involved in the transportation of hazardous goods. | 13 | K3 | CO1 |
| OR | | | |
| b) Evaluate the role of training and certification programs for personnel involved in the transportation of hazardous goods. | 13 | K5 | CO1 |
| 12. a) Discuss the importance of road safety regulations in reducing traffic accidents and fatalities. | 13 | K3 | CO2 |
| OR | | | |
| b) Discuss the benefits and challenges of implementing autonomous vehicles for enhancing road safety. | 13 | K3 | CO2 |
| 13. a) Discuss the role of driver fatigue in road accidents, and propose strategies to mitigate its impact on road safety. | 13 | K3 | CO3 |

OR

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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- b) Analyze the relationship between driver education and road safety outcomes, including attitudes, knowledge and skills. 13 K4 CO3
14. a) Illustrate the details that have to be collected while conducting parking inventory survey with a neat sketch. 13 K3 CO4
- OR**
- b) Summarize the different methods of collecting Origin Destination (OD) studies with its significance. 13 K4 CO4
15. a) Discuss in detail the various methods of traffic regulatory measures traffic management. 13 K3 CO5
- OR**
- b) Sketch with conflicts points for pedestrians and vehicles and explain them. 13 K3 CO5

PART - C (1× 15 = 15 Marks)

16. a) Compare and contrast the transportation of hazardous goods by road, rail, air and sea in terms of safety measures and regulations. 15 K5 CO6
- OR**
- b) Assess the effectiveness of road safety campaigns and public awareness initiatives in changing driver behavior. 15 K6 CO6