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Question Paper Code	12645
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M.E. - DEGREE EXAMINATIONS, APRIL / MAY 2024

Second Semester

**M.E. - Industrial Safety Engineering
20PISEL201 – TRANSPORT SAFETY**

Regulations - 2020

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. What is the importance of transport emergency card?	2	K1	CO1
2. List the safety rules to be followed during servicing of a vehicle.	2	K2	CO1
3. Explain road ecology.	2	K2	CO2
4. What do you understand by the term "Gross vehicle weight"?	2	K1	CO2
5. Write the data's are collected during accident report.	2	K1	CO3
6. Define occupational accident.	2	K1	CO3
7. What role does weather conditions, such as rain, snow, or ice, play in tractive resistance?	2	K1	CO4
8. What factors should drivers consider when approaching and navigating through intersections?	2	K2	CO4
9. Mention the important factors for analyzing material handling problem.	2	K2	CO5
10. Define the process of battery charging.	2	K1	CO5

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11. a) In the design and implementation of transport emergency cards (TECs) for hazardous materials shipments, what engineering considerations should be taken into account to ensure their effectiveness in emergency response situations?	13	K3	CO1
OR			
b) Elucidate the potential fire and explosion hazards presented by static electricity in flammable or combustible environments.	13	K3	CO1
12. a) Evaluate the root cause behind occurrence of road accidents.	13	K5	CO2
OR			
b) Examine the diverse range of insurance coverage options available in motor vehicle insurance policies, such as liability, collision, and comprehensive coverage.	13	K4	CO2

13. a) Examine the important factors considered to selection criteria process for the drivers. 13 K4 CO3

OR

- b) Discuss the role of technology, such as emergency notification systems and geographic information systems in enhancing emergency planning capabilities. 13 K3 CO3

14. a) Investigate the importance of proactive foresight and financial planning for pavement maintenance and rehabilitation, driven by pavement condition data. 13 K4 CO4

OR

- b) What is an intersection? Explain in detail any two classification of intersection. 13 K3 CO4

15. a) Identify the parameters which influence the safety during inspection and testing of mechanical handling equipment. 13 K3 CO5

OR

- b) Examine the factors influence in safety during the operations of gasoline handling. 13 K4 CO5

PART - C (1× 15 = 15 Marks)

16. a) Explain in detail the motor vehicles act 1988 by citing a practical example from present day road transport scenario. 15 K2 CO6

OR

- b) Discuss in detail the motor vehicle insurance and surveys. 15 K3 CO6