

25PEIS04 ROAD TRANSPORT SAFETY (3-1-0)

Module - I (10 Hours)

TRANSPORTATION OF HAZARDOUS GOODS

Transport emergency card (TREM) – driver training-parking of tankers on the highways- speed of the vehicle – warning symbols – design of the tanker lorries -static electricity- responsibilities of driver – inspection and maintenance of vehicles-check list- loading and decanting procedures – communication.

Module - II (10 Hours)

ROAD TRANSPORT

Introduction – factors for improving safety on roads – causes of accidents due to drivers and pedestrians- design, selection, operation and maintenance of motor trucks-preventive maintenance-check lists-motor vehicles act – motor vehicle insurance and surveys.

DRIVER AND SAFETY

Driver safety programme – selection of drivers – driver training-tacho-graph-driving test- driver's responsibility- accident reporting and investigation procedures-fleet accident frequency-safe driving incentives-slogans in driver cabin-motor vehicle transport workers act- driver relaxation and rest pauses – speed and fuel conservation – emergency planning and Haz mat codes

Module - III (10 Hours)

ROAD SAFETY

Road alignment and gradient-reconnaissance-ruling gradient-maximum rise per k.m.- factors influencing alignment like tractive resistance, tractive force, direct alignment, vertical curves- breaking characteristics of vehicle-skidding-restriction of speeds-significance of speeds- Pavement conditions – Sight distance – Safety at intersections – Traffic control lines and guide posts-guard rails and barriers – street lighting and illumination overloading - concentration of driver.

Plant railway: Clearance-track-warning methods-loading and unloading-moving cars-safety practices.

Module - IV (10 Hours)

SHOP FLOOR AND REPAIR SHOP SAFETY

Transport precautions-safety on manual, mechanical handling equipment operations-safe driving-movement of cranes-conveyors etc., servicing and maintenance equipment-grease rack operation-wash rack operation-battery charging-gasoline handling-other safe practices-off the road motorized equipment.

Text Books

1. Popkes, C.A. "Traffic Control and Road Accident Prevention" Chapman and Hall Limited, 1986.
2. Babkov, V.F., "Road Conditions and Traffic Safety" MIR Publications, Moscow, 1986.

References

1. Kadiyali, "Traffic Engineering and Transport Planning" Khanna Publishers, New Delhi, 1983.
2. Motor Vehicles Act, 1988, Government of India.
3. Accident Prevention Manual for Industrial Operations", NSC, Chicago, 1982.
4. Pasricha, "Road Safety guide for drivers of heavy vehicle" Nasha Publications, Mumbai, 1999.
5. K.W.Ogden, "Safer Roads – A guide to Road Safety Engineering