COURSE GUIDE

KHE 212
Driver Education

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Introduction

Course Competencies

Course Objectives

Working Through this Course

Study Units

References and Further Readings

Presentation Schedule

Assessment

How to get the Most from the Course

Facilitation

Course Information
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Module 1

Module Introduction

In this module you are going to be taught the meaning and concept of Driver Education. Driver Education is a program that exposes the drivers and prospective drivers to the knowledge and skills that will encourage them to impove their attitudes and behaviours towards save driving.

Acquiring driving skills is an important segment of driver education because skill is how one can be judged whether is effective or not. These driving skills invole both phycial and mental trainings that will make a driver safety causcious. In this module you will learnt the meaning of driving skill, essential driving skills and classification of driving skill. This module contains the following units:

Unit 1: Meaning and Concept of Driver Education
Unit 2: Meaning of vehicle driving skills

Unit 1: Meaning of Driver Education

Contents

1.0 Introduction

Driver education is a reflection of a genuine and ongoing commitment to improving driving safety. Driver education enables the licensed and prospective drivers to access timely and appropriate education and training. The question now is what is driver education?. In this unit you will be exposed to the meaning and concept of driver education.

Driver education (or Driver's education) is intended to supplement the knowledge obtained from government-printed driving handbooks or manuals and prepares students for tests to obtain a driver's license or learner's permit.

2.0 Intended Learning Outcomes (ILOs)

By the end of this unit, you will be able to:

- explain the meaning of driver education
- discuss the scopes the of Driver Education

3.0 Main Content

3.1 Meaning and Concept of Driver Education

Driver education is a formal class or program that prepares a new driver to obtain learner permit or driving license. The formal class program may also prepare existing license holders for an overseas license conversion or medical assessment driving test or refresher course. It may take place in a classroom, in a vehicle, online, or a combination of the above. Topic of instruction includes traffic codes or laws and vehicle operation. Typically, instruction will warn of dangerous conditions in driving such as road conditions, driver impairments, and hazardous weather. Instructional videos may also be shown, demonstrating proper driving strategies and the consequences for not observing the rules.

Driver education is intended to supplement the knowledge obtained from government-printed driving handbooks or manuals and prepares students for tests to obtain a driver’s license or learner’s permit. In-car instruction places a student in a vehicle with an instructor. A car fitted with dual controls, which has pedals or other controls on the passenger side, may be used.

A driver's education teacher is a person who imparts knowledge of defensive driving skills, state driving laws, accident causality and avoidance, and basic traffic courtesy to intending drivers. The majority of this teachers work in driving schools, teaching first-time drivers. Driver education teachers candidates also mandatorily underwent background checks, have valid driver's licenses and good driving records. They are also supposed to be capable of fulfilling any requirements their road safety office has for intending teachers.

The problem affecting safe travelling in Nigeria and Africa in general is road traffic crashes and this is worrisome. Most people driving on Nigerian roads are ignorant of the rules, procedure and regulations governing driving.

Everybody should have deep knowledge and understanding of the content of Driver Education. The school should have it as one of its responsibility of training teachers about the rudiments of driver education. The content of driver education should cover different aspects such as traffic citizenship where people will learn about their responsibilities as road users and also learn attitude of safe driving, laws and regulation and their enforcement by the court. The content also includes both political and theoretical aspects of driving to stay alive.

Question

Defined driver education

3.2 Scope of Driver Education

The National Commission on Safety Education listed some selected topics, not as a teaching outline but as an indication of the nature and scope of content for a complete program in driver education, these are

3.2.1Traffic Citizenship

- Responsibility to other drivers and highway users.
- Responsibility of drivers to community, family or self
- Attitudes of safe living.
- Courtesy and manners
- Support of public officials
- Traffic control devices.

3.2.2 Laws and regulations and their enforcement by courts

- Uniform traffic laws and ordinances
- State motor vehicle laws
- Uniform vehicle code and model traffic ordinances
- Official safety agencies.

3.2.3Characteristics of Drivers, mental, emotional, physical and physiological

3.2.4. Society and Driving

- Effects of alcohol and drugs
- Psychology and driving.
- Our culture and driving

3.2.5. Driving Skills:

- Basic habits and maneuvers
- Driving in the city
- Driving on the highways
- Driving on expressways
- Hazardous conditions and meeting emergencies
- Efficient driving

3.2.6. Development of judgments

- Vision and perception
- Knowledge and analysis of traffic situations
- Making decision, reaction time
- Physical laws that affect drivers and pedestrians.

3.2.7. The Motor vehicle

- History and development
- Economics of vehicle ownership
- Trip planning
- Mechanism of the vehicle
- Safety devices
- Vocational driving

3.2.8. Traffic Accidents

- **Cause;**
- Human and economic loss
- What to do in case of an accident
- Built-in response system for meeting the unexpected
-

SELF-ASSESSMENT EXERCISE

1. The act of instructing and preparing new driver that qualifies him to drive on the road is
   (a) Driver education (b) driver license (c)license education (d) driving school. ANS (A)
2. Driving education can take place in I- School only II- In a vehicle only III- Online only (a)I only (b)II &III only (c) I &III only (d) I, II III only. ANS D
3. The essence of driving education is to (a) prepare students for tests (b) supplement knowledge obtained from government and prepared students for tests (c) get printed driving handbooks (d) get manuals. ANS B
4. The problem affecting safe travelling in Nigeria and Africa in general is (a) road traffic crashes (b) bad roads (c) bad road users (d) illegal driving. Ans A
5. Topics of instruction in driving education include (a) traffic codes (b) laws (c) traffic codes, laws and vehicle operation (d) laws operation. Ans C

6.0 Summary

In this unit, you have been told that driver education is a formal class that is intended to expose the prospective or existing drivers to the skills and knowledge of driving. You have been told that this learning can take place in the classroom, in the vehicle or online and it can be combination of both. You have also been told that the program cut across you responsiliies to the society, you attitude to safety, courtesy and manners. .

7.0 References/Further Readings

Federal Road Safety Commission (1997), Highway Code.

Murray W, Dubens E, Darby P. Virtual fleet risk manager. Napier University, Edinburgh, Scotland; 19 January 2004.

Nilsson G. Reduction in the speed limit from 100 km/h to 90 km/h during summer 1989: Effects on personal injury accidents, injured and speeds. Report No. 358A. Linkoping, Sweden: Swedish Road and Traffic Research Institute; 1990.

Unit 2: Meaning of vehicle driving skills

Contents

1.0 Introduction

Driving in traffic is more than just knowing how to operate the mechanisms which control the vehicle; it requires knowing how to apply the rules of the road (which ensures safe and efficient sharing of roads with other users). An efficient driver also has an intuitive understanding of the basics of vehicle handling and can drive responsibly. As a professional driver, you will no doubt always endeavour to drive to the best of your ability. However it is also your responsibility to put your advanced driving skills to good use by anticipating the behaviour of other, less skilled, road users. You have the enhanced ability to anticipate and avoid incidents.

2.0 Intended Learning Outcomes (ILOs)

By the end of this unit, you will be able to:

- explain the meaning of vehicle driving skills
- mention and demonstrate vehicle driving skills at different stages.

3.0 Main Content

3.1 Meaning and Concept of Vehicle Driving Skills

Driving is the controlled operation and movement of a motor vehicle, including cars, motorcycles, trucks, and buses. Permission to drive on public highways is granted based on a set of conditions being met and drivers are required to follow the established road and traffic laws in the location they are driving.

Skill is a very broad term that can include many different components, but it usually is a measure on how effective a pre-defined task is completed. The task can be defined at different levels, which for driving can be complex tasks as for example winning races or to go from point A to B without any incidents. It can also be as small as shifting the gear at an appropriate time or spotting wild life at the side of the road. For all these tasks a person evolves a process of executing the task in a more coordinated or automated way with less mental workload involved and/or less error, which can be considered as becoming more skilled. These skills are physical skills, mental skills, beginning skills and intermediate skills. The explanation on them will be given below.

Some of the essential skills you must have before you are allowed to proceed to the road are discussed below:

3.1.1. Driving Preparation

As a learner you should be able to make the appropriate preparations before driving the car. These preparations include the vehicle self-inspection.

Once you are certain that your vehicle is safe to drive.

- Adjust your driving seat to ensure that it is suitable for you.
- Adjust the mirrors if it is necessary
- Check the doors to ensure that they shut properly
- Fasten your seat belt and ensure that all passengers also do so
- Sit in the correct driving position – your back should get adequate support and your feet should reach the pedals
- Hold the steering wheel correctly – It should be held with both hands in the positions illustrated below. Your hands should hold the steering wheel naturally, not too stretched or too bent
- From this position you should get a clear view of what is ahead of and around you. You should also comfortably operate the brakes and the accelerator
- Check all the instruments at the dashboard and ensure that they are all in good working order
- Once this is done you can turn on the ignition and start practicing your driving skills

3.1.2. Car Movement and Control

1. To start the vehicle

Fully depress the clutch pedal and wait for three seconds
Start the engine as follows
Put the hand brake ON

Turn the ignition switch ON o Turn the motor switch ON
Start motor control by turning the ignition key and releasing it when the engine strats

Step lightly on the accelerator to warm the engine
Check rear view mirrors
Give the proper signal before moving
Select the appropriate gear
Increase the engine speed using the accelerator
Move the handbrake to the OFF position
Let the clutch pedal rise until the engine speed decreases slightly under the load. Keep your feet in this position – on the clutch and accelerator pedals

2. To stop the vehicle

- Check the rear view mirrors to ensure that it is safe to stop
- Signal properly to alert other road users
- Remove the foot from the accelerator
- Apply pressure on the foot brake and maintain it as necessary
- Depress the clutch pedal as the car comes to rest and maintain the pressure
- Set the hand break at the ON position
- Put the gear lever in the 1ST position
- Switch off the engine
- Remove your foot from the break clutch pedal and then from the brake pedal

3. Using the gears

Most vehicles have five forward gears and one reverse gear. You should know the appropriate gear speed to be used when driving. You should learn to proficiently change from 1st to 5th gear without looking.
The neutral position is where no gear is selected. Before starting the engine, the gear should be in neutral position.

1st Gear – This is used when moving off from a stationary position. This gear is for travelling between 0 and 30 km/h

2nd Gear – This allows you to move faster and is also applied in slow moving traffic because it is more economical. It is also the ideal gear for moving downhill from a stationary position.

3rd Gear - This is the appropriate gear for travelling between 35 and 70 km/h

4th Gear – This is the appropriate gear for travelling between 60 and 110 km/h. The 4th gear provides more power and speed to the engine and can be used when overtaking another vehicle.

5th Gear - This is the appropriate gear for travelling between 80 and 110 km/h.

This gear is used on highways where the speed limits are higher.

Steering the vehicle:

- Hold the steering wheel correctly
- To steer in a straight course position your hands in the 10-minutes-to-2 position and aim the car in the general desired direction. Lightly correct the vehicle's tendency to turn from the neutral position.
- To avoid injury from the airbag position your hands in the 9 and 3 position
- To change direction, pull the steering down in the direction you wish to turn. Bring it down to meet your other hand then push the steering wheel up until the turn has been executed

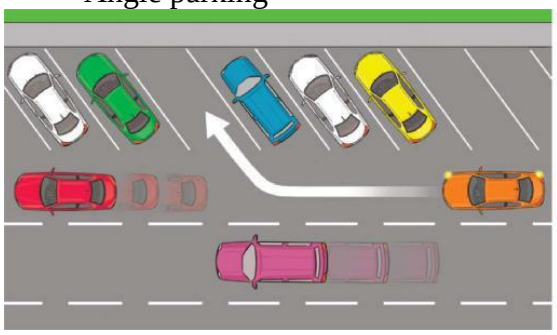
5. Parking at the kerb

You should always find a parking space that is legal and convenient to park. To park you vehicle take the following steps:

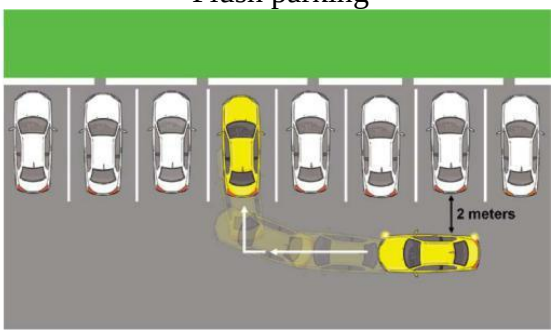
- Look into your rear view mirror so that you can know what is around you. If there are no vehicles behind you, you may slow down to get a clearer picture of what is around you.
- Locate a safe and convenient parking position
- Use your indicator signals to inform other road users of your intention to slow down and park
- Slow down the vehicle by covering the brake and the clutch
- Gradually move a to a suitable distance from the kerb
- Apply the brake gently and 5 metres from your intended stop, press the clutch as to avoid stalling the car
- Stop. Apply the handbrake and select neutral to cancel the indicator
- Remove feet from the pedal or accelerator

Different types of parking.

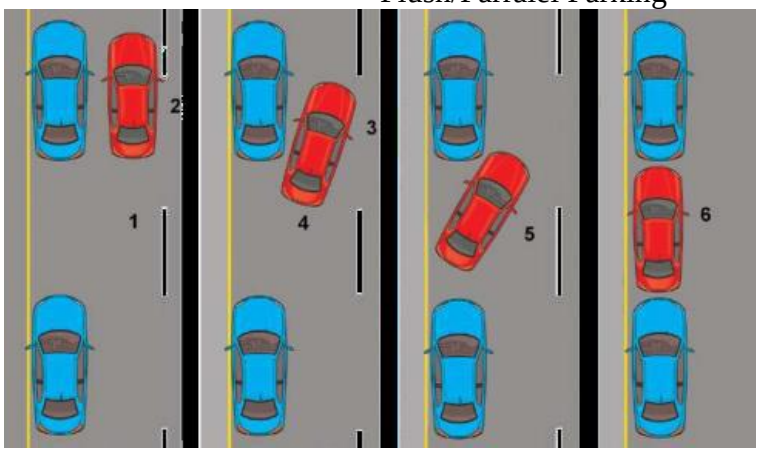
Angle parking



Flush parking



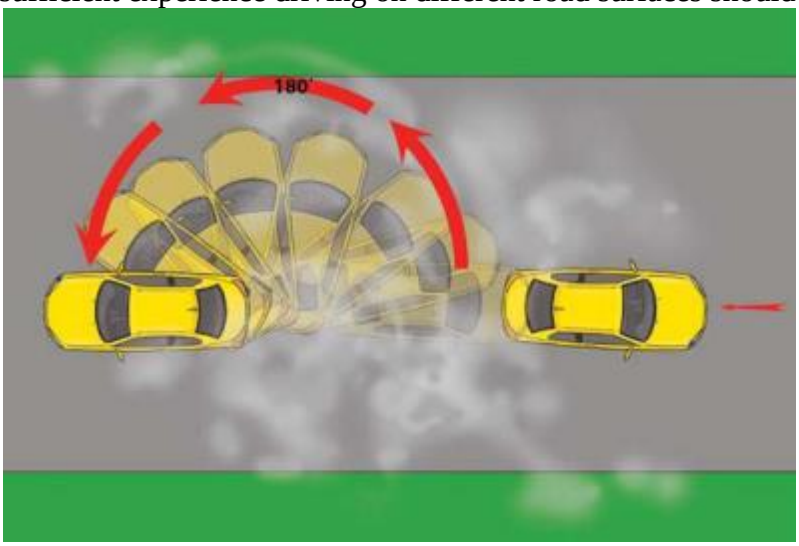
Flush/Parralel Parking



6. Turning

J-turns

A J-turn is a driving maneuver in which a reversing vehicle turns 180 degrees and continues, facing forward, without changing direction of travel. Only a confident driver who has had a sufficient experience driving on different road surfaces should do this type of turn.

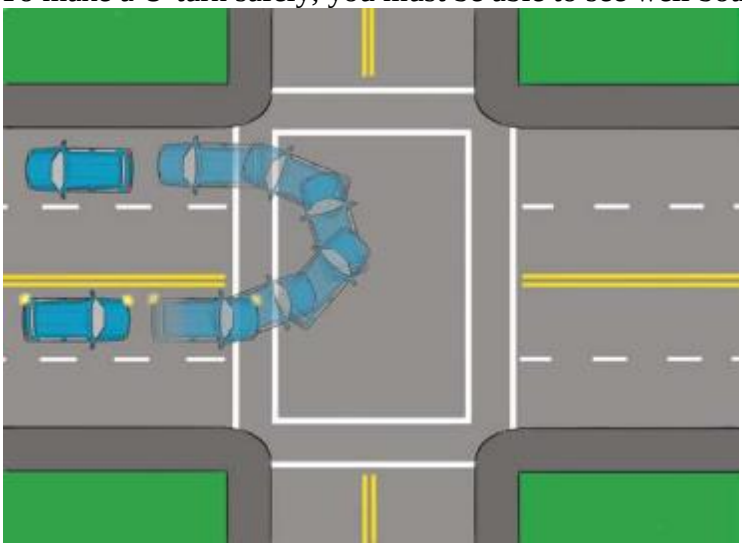


J-turns by reverse driving

U-turn

A U-turn is a driving maneuver in which a forward driving vehicle turns 180 degrees and continues, facing forward, but moving in the opposite direction.

Before you make a U-turn, check to make sure that there is no sign that says you should not. To make a U-turn safely, you must be able to see well both sides.



U-Turn by forward driving

https://www.youtube.com/watch?v=gvim3YjvRp8

7. Driving on Bends

When approaching a bend, it is important to note how sharp the bend is. Look out for road signs and markings which would indicate the type of bend you are going to encounter. Adjust your speed accordingly. If you are too fast you are more likely to skid or lose control of your

car. Surrounding trees, hedges, buildings and streetlights can give you a good indication of how sharp the bend is if there are no road signs. As you approach the bend, apply the MSM technique to communicate with other road users

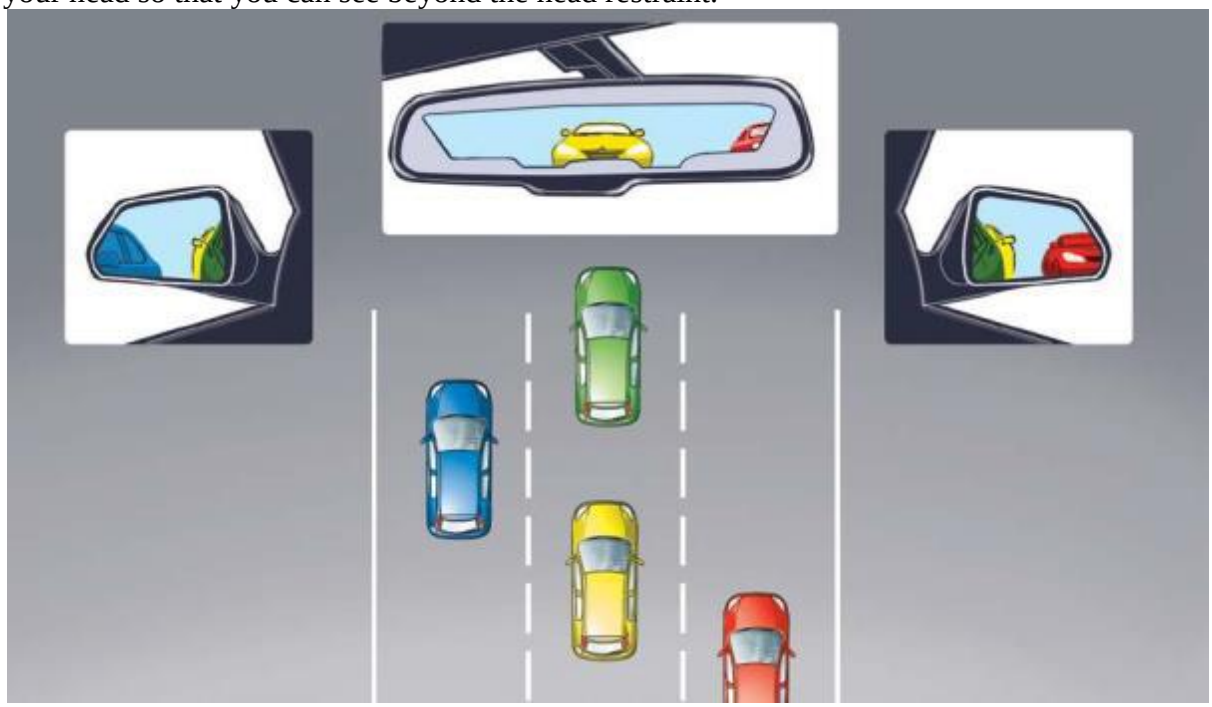
- Slow down and select a lower gear
- Do not brake as you steer round the bend
- When leaving a bend, check your mirrors and gently accelerate to the speed appropriate for the traffic conditions

8. Driving on Hills

This requires you to anticipate what is ahead of you. While going downhill you have a clearer view but going uphill you see less of what is ahead of you. When driving downhill, switch to a lower gear so that the engine controls some of the braking. This protects your brakes from excessive wear and tear. It takes longer for the vehicle to stop therefore you need a greater stopping distance. When driving uphill, switch to a lower gear so as to maintain your speed.

9. Reversing

Use your mirrors to assist you in seeing what is behind you. When reversing, you may tilt your head so that you can see beyond the head restraint.



Always reverse at slow speed so as to retain control of your steering. To steer the car in reverse, turn the wheel in the direction you want the rear of the car to go. Turning the wheel to the right steers the back of the car to the right. Turning the wheel to the left steers to the left

A customer refers to anyone that you have to deal with in the course of riding or driving on the road. In this case, the customer may be a pedestrian, a passenger and other motorists

3.2 Essential Driving Skills

The following are essential skills any driver should have:

- Communication skills
- Handling customer expectations
- Handling customers with special needs

- Knowledge of sexual harassment and other forms of Discrimination.

Communication Skills
Communication is the process of using words, sounds or behaviour to pass on information. Communication is necessary for all road users as it allows for shared and safe use of the road with minimal disruption. It is important to know and understand how other road users communicate so as to ensure safety and harmony along the road.

Importance of communication skills
The traffic situation brings together different types of road users – pedestrians, cyclists, riders and other motorists – and also different types of individuals with varying personalities and varying needs. As such it is not enough to know the rules of the road. It is also important to learn how to interact with different types of individuals.
The following are some elements of communication that every road user should learn:

- Patience
- Attitude
- Language

Courtesy on the road
Courtesy involves applying all the elements of good communication - patience, having a positive attitude and using appropriate language.

- Ensure that you get the right training and a license before you venture out on the road
- You should always apply all road safety techniques as required for safe driving
- Having a positive attitude enables you to complete tasks with confidence and to respond appropriately to instructions or signals from the authorities, road signals and other road users

Handling Customer Expectations
The driver or rider should always prioritize their safety by ensuring that they observe all the correct safety procedures. This section primarily addresses the needs of customers who are paying for the service as passengers or owners of goods that need to be transported but all these guidelines can also be applied to private motorists and motorcycle riders who are ferrying goods or passengers.

Before embarking on any trip ensure that you:

- Pick and drop off passengers or goods at the appropriate and designated points
- Provide sufficient time for passengers to board and alight from the vehicle. Be patient, do not rush them
- Assist passengers who may need help in embarking and disembarking from the motorcycle
- Address customers in respectful language so that there is less room for misunderstanding
- Be professional: This means giving clear information about the service you provide, the charges and any other detail that would ensure that you, the service provider, and the customer have clear expectations
- Provide a helmet and reflective jacket for your passengers
- Let your passengers know how to correctly position themselves on the motorcycle
- Provide appropriate sitting for all passengers.

- Where possible, and in particular for the PSV, ensure that you designate sitting for the elderly, sickly, and expectant mothers. Make arrangements for them to access seats that are most convenient for easy boarding and alighting. Give special consideration for passengers with disabilities and offer assistance where requested
- Do not carry more passengers or goods than you are legally allowed to ferry
- Know the weight restrictions related to your vehicle or motorcycle. Do not exceed this
- Ensure that you are appropriately equipped to handle the goods to be ferried from one location to another

Time and Stress management skills

- Ensure that your passengers or goods are ferried within the expected time. Where unexpected circumstances cause a delay, let your customer know
- Get sufficient rest and nutrition to that you are strong and healthy enough to ride your motorcycle.
- Take breaks between journeys and only work within legally stipulated hours so that you, your passengers and goods are safe from the risk of accidents caused by fatigue

3.3Sexual Harassment, Discrimination and Defensive Riding

3.3.1. Sexual Harassment

This is a form of bullying or coercion which happens when a person directly or indirectly makes unwelcome requests for sexual intercourse, sexual contact, other sexual activity, uses written or spoken language of a sexual nature, uses visual material or shows physical behaviour of sexual nature.

3.3.2. Discrimination

Occurs when you chose to treat customers favourably or unfavourably because of their appearance, race, ethnic identity, gender or age.

- Both sexual harassment and discrimination are anti-social behaviours that discourage positive interaction on the road.
- It is important to create a working environment where vulnerable passengers are safe and are less likely to encounter inappropriate behaviour, language or contact.
- Ensure that you have a procedure in place to deal with sexual harassment and discrimination should you encounter it.
- When faced with sexual harassment or discrimination, speak up, address the issue with the administrative authority and seek assistance from the police.

3.3.2. Defensive Riding

Defensive riding is important when in the following condition

- Adverse weather conditions such as rain, fog or windy. In these cases, the road surface may change and so you need to apply different techniques to avoid danger
- Different road conditions that may be difficult to manoeuvre such rough terrain, wet surface or sloping surfaces

Defensive riding techniques

- Improving observation, anticipation and awareness consistent with the riding speed
- Applying sound judgment of speed and distance
- Don’t drive when you are tired, rest before any journey
- Before you are issued a driving license in some countries, your assessment will be based on both practical driving test and theoretical knowledge of the rules of the road and those who pass are issued with a license. They are elaborated below as follows:

3.4Classification of Driver Skills

3.4.1 Physical skill

A driver must have physical skills to be able to control direction, acceleration, and deceleration. For motor vehicles, the detailed tasks include:

- Starting the vehicle's engine with the starting system
- Setting the transmission to the correct gear
- Depressing the pedals with one's feet to accelerate, slow and stop the vehicle and if the vehicle is equipped with a manual transmission, to modulate the clutch
- Steering the vehicle's direction with the steering wheel
- Applying brake pressure to slow or stop the vehicle
- Operating other important ancillary devices such as the indicators, headlights, parking brake and windshield wipers
- Observing the environment for hazards

3.4.2. Mental skill

Avoiding or successfully handling an emergency driving situation can involve the following skills:

- Making good decisions based on factors such as road and traffic conditions
- Evasive maneuvering
- Proper hand placement and seating position
- Skid control
- Steering and braking techniques
- Understanding vehicle dynamics

It is required by government that each student should be tested on specific skills and if passed can now receive their license. These skills can be categorized as follows: beginning, intermediate, and advanced driving skills.

3.4.3. Beginning Skills

To lay solid foundations of driving a vehicle, these skills are essential. They include steps to complete before driving and maneuvers done in a parking lot, before ever operating a vehicle on the road.

Skills

- A driver is expected to inspect the vehicle is about to driver by checking the tyres, radiator water level and engine oil. This is called pre-vehicle inspection
- Having carried out the pre- vehicle inspection, when turn on ignition, the driver is expected to read dashboard gauges.
- To starting the vehicle, the driver is expected to check that the gear is neutral.
- How to turn steering smoothly and movements
- How to adjust and use both inside and outside mirrors
- Accurate navigating of vehicle
- How to make accurate and smooth turns
- Backing Up
- How to properly sit and position the body while driving
- How to stop smoothly and controlled.
- How to park in a marked stall
- How to turning off the car

3.4.4. Intermediate Driving Skills

Having learned and mastered basic skills, these skills are next. The intermediate skills are learned and practiced on the road are not in heavy traffic. Before practice can be done, the student should have learned the driving laws and the meaning of all the traffic signs. It is advisable that Master these skills before moving on to the advanced section.

In-Text Question(s)
3.3. Sub-Heading

 Discussion

 Case Studies

In-Text Question(s)

Copy and paste the icon in the place they are required for use

4.0 Self-Assessment Exercise(s)

16. Which of the following is among road users (a) tricyclists (b) motorcyclists (c) bicyclists (d) All of the above. ANS D
17. A good attitude of road users includes (a) courteous to other road users (b) not coexist with other road users (c) intolerant of pedestrians (d) distractions. ANS A
18. All the following leads to accidents except (a) distractions (b) muscular strength(c) daydreaming (d) fatigue. ANS B
19. Which of these is not characteristic of a good driver (a) Good driving habit (b) changes gears and accelerate smoothly (c) A good driver should not be able to anticipate what other road users will do (d) Precise co-ordination and sound judgment. ANS C
20. A good driver should use the signals rightly and ineffectively. True/ False ANS FALSE

5.0 Conclusion

Driving skills can be categorized into physical and mental because knowing the traffic rules and regulations without proper attitude, patience and language may yield a very little result as to driving safety. A well skilled driver will equipped him with both physical and mental skills

that enable him to communicate well with other road users such as cyclists, pedestrians and road officials.

6.0 Summary

In this unit you have learnt that driving is the controlled operation and movement of a motor vehicle, including cars, motorcycles, trucks, and buses while skills are measures on hoe effective a pre-determined tasks is completed. You have been told that essentials driving skills are driving preparation, car movement and control, communication skill, handling customer expection, handling customers with special needs, knowledge os sexual harassment and othe forms of discrimination. Do not forget that you have been told that driving skills can be classified into physical, mental, beginning and intermediate.

7.0 References/Further Readings

Federal Road Safety Commission (1997), Highway Code.

Murray W, Dubens E, Darby P. Virtual fleet risk manager. Napier University, Edinburgh, Scotland; 19 January 2004.

Nilsson G. Reduction in the speed limit from 100 km/h to 90 km/h during summer 1989: Effects on personal injury accidents injured and speeds. Report No. 358A. Linkoping, Sweden: Swedish Road and Traffic Research Institute; 1990.

Tomlinson J., Olevson D. and Sugar J(n.d) What Is A Motor Vehicle And What Constitutes Its Use And Operation: An Investigation Into Policy Applicability And Coverage

Module 2

Module Introduction

Vehicles are of different classes and functions, therefore the knowledge of the meaning and classifications of vehicles is very essential in driver education skills acquisition training. In this module you are going to learn the meaning and what constitutes a motor vehicle. You will also learn so terminologies in motor vehicle as well as the types of vehicle.
In this module, you are going to learn about all those sings and symbols that are placed by the either side of the highway and on the road or displayed by other road users. In this module the lesson will have the following unit as follows:

Unit 1: Functions of Motor Vehicles
Unit 2: Road Traffic Signs

Unit 1: Functions of Motor Vehicles

Contents

1.0 Introduction

In the last unit, you were exposed to driving skills. This unit consolidates on your understanding by exposing you to the meaning, types and uses of motor vehicles. Rodrigue and Notteboom (2009) establish the connection between transportation development and development of any economy of a nation. Like other activities that are intensive in utilization of infrastructure, the transport sector is an important component of the economy impacting on development and the welfare of the people. Transport provides the networks through which the economic life of people, information and raw materials as well as finished products can be moved from one place to another (Ighodaro, 2009). Road transportation provides benefit to nations and individuals by facilitating the movement of goods and people thereby enabling increased access to jobs, economic markets, education, recreation and healthcare, which in

turn have direct and indirect positive impacts on the health of populations (WHO, 2009).You are going to learn about what constitutes a motor vehicle and determine what constitutes the use and operation of a motor vehicle.

2.0 Intended Learning Outcomes (ILOs)

By the end of this unit, you will be able to:

- explain the meaning of vehicle
- describe the components of a motor vehicle
- discuss classifications of motor vehicles
- describe the functions of motor vehicles

3.0 Main Content

3.1 Motor Vehicles

"The word "vehicle" in its original sense conveys the meaning of a structure on wheels for carrying persons or goods. We have generally distinguished carriage from haulage, and mechanical units whose chief function is to haul other units, to do other kinds of work than carrying, are not usually looked upon as vehicles.

"The Oxford English Dictionary defines a vehicle as: a means of conveyance provided with wheels or runners and used for the carriage of persons or goods. The term "vehicle" includes a motor vehicle, trailer, traction engine, farm tractor, road-building machine, bicycle, and any vehicle drawn, propelled, or driven by any kind of power, including muscular power, but does not include a motorized snow vehicle or a street car.

3.1.1What constitutes a motor vehicle?

Section 1.1 of the Highway Traffic Acts (*HTA)* defines the term "motor vehicle" as:

"motor vehicle" includes an automobile, a motorcycle, a motor-assisted bicycle unless otherwise indicated in this Act, and any other vehicle propelled or driven otherwise than by muscular power, but does not include a street car or other motor vehicle running only upon rails, a power-assisted bicycle, a motorized snow vehicle, a traction engine, a farm tractor, a self-propelled implement of husbandry or a road-building machine; ("vehicle automobile")"

3, 1.2.Classification of Motor Vehicles

Class 1 - Light vehicles: Light vehicles are motor vehicles, other than heavy vehicles as defined below, with or without a trailer, and include motorcycles, motor tricycles and motor cars.

Class 2 - Medium heavy vehicles: Medium heavy vehicles are heavy vehicles, as defined below, with two axles.

Class 3 - Large heavy vehicles: Large heavy vehicles are heavy vehicles, as defined below, with three or four axles.

Class 4 - Extra large heavy vehicles: Extra large heavy vehicles are heavy vehicles, as defined below, with five or more axles.

3.1.3 Terminologies in Motor Vehicle

“Axle” means a device or set of devices, whether continuous across the width of the vehicle or not, around which the wheels of the vehicle rotate and which is so placed that, when the vehicle is travelling straight ahead, the vertical centre-lines of such wheels are in one vertical plane at right angles to the longitudinal centre-line of such vehicle. Axle shall also include an axle that is lifted and of which the wheels are not in contact with the road surface.

“Heavy axle” means an axle the wheels of which are fitted with tyres of a size (bead seat diameter) greater than 406,4 millimetres (16 inches), or an axle with more than two (2) wheels irrespective of tyre size, but excluding any axle of a motorcycle, a motor tricycle or a motor car.

“Heavy vehicle” means a motor vehicle with at least one heavy axle and/or any vehicle which is principally designed or adapted for the conveyance of persons exceeding sixteen (16) in numbers.

“Light delivery vehicle” means a motor vehicle designed or adapted for the conveyance of persons and freight with no heavy axle.

“Light vehicle” means a motor vehicle, other than a heavy vehicle.
“Motor car” means a motor vehicle, other than a motorcycle or a motor tricycle, designed or adapted solely or principally for the conveyance of persons not exceeding sixteen (16) in numbers, but excluding any vehicle with an axle with more than two (2) wheels irrespective of tyre size.

“Motorcycle” means a motor vehicle that has two wheels and includes any such vehicle having a side-car attached thereto.

“Motor tricycle” means a motor vehicle, other than a motorcycle with a side-car, which has three wheels and which is designed to be driven by means of the type of controls usually fitted to a motorcycle.

“Motor vehicle” means an entity comprising of one or more mechanically/electrically powered units with or without any trailer(s) physically joined by means of tow bars, tow ropes or mechanical articulation, and includes, inter alia:
3.2 Types of Vehicles

Figure 1 Types of Vehicles

Private Cars
These are vehicles used for social, domestic and pleasure purposes

Commercial Vehicles (Taxis, Buses and Hire Cars)
These are vehicles used for carrying fare paying passengers

Commercial Vehicles (Own Goods)
These are vehicles used for carrying commercial goods owned by the insured

Commercial Vehicles (General Cartage)
These are vehicles used for carrying goods belonging to others for hire or reward

Motorcycles / Tricycles
These are two or three – wheeled auto-bicycles used social, domestic, pleasure and sometimes for commercial purposes

In-Text Question(s)

 Discussion

 Case Studies

In-Text Question(s)

Copy and paste the icon in the place they are required for use

4.0 Self-Assessment Exercise(s)

1 Explain the meaning of vehicle
2. Mention the classes of vehicles with examples
3. Briefly explain the following terms: axle; heavy axle; light motor vehicle
4. List the types of vehicle and their uses

5.0 Conclusion

.Vehicles is known to be any structure that can take people and thing from one place to another with the assistance of wheels. Drivers of these categories of these groups of vehicle are road users who have the responsibilities of ensuring safety on the road.

6.0 Summary

You have learnt about the meaning, what constitutes a motor vehicle, classifications of motor vehicle and their uses. You have learnt that types of vehicles can be used for private and commercial purposes and can be two, three or four wheel.

7.0 References/Further Readings

Industrial and General Insurance Plc.(2019) https://www.iginigeria.com/detail?id=NDQ=&pid=NjE

Tomlinson J., Olevson D. and Sugar J(n.d) What Is A Motor Vehicle And What Constitutes Its Use And Operation: An Investigation Into Policy Applicability And Coverage.

Unit 2: Road Traffic Signs

Contents

1.0 Introduction

Some road signs are placed on roads to point out directions to motorists; some are placed there to ensure the safety of motorists and pedestrians; some are there to give us an idea of what to expect ahead of us. In this unit, you will learn road traffic signs and their several purposes.

2.0 Intended Learning Outcomes (ILOs)

By the end of this unit, you will be able to

Describe road traffic signs
Identify the purposes of road traffic signs
Explain the types of road signs
Identify significant road signs
Describe the appropriate response to common road signs
……

3.0 Road Signs

3.1 Concept of Road Signs

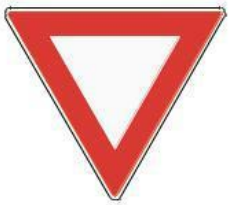
Technically, road signs are traffic languages. They communicate specific messages to motorists and pedestrians. Every motorists and in some cases, pedestrians are expected to have an understanding of what these signs represents.

3.2. Types of Road Signs.

3.2.1. Regulatory Signs

Stop

Stop / Go control



Give Way

No Entry

No Entry/ Do Not Enter

This signs is used to indicate that there is no entry for vehicular traffic. It is placed at the exit of some roads to inform motorist that they cannot drive into that road. It is often used at intersections to roads with one-way traffic.

No Stopping

A ‘No Stopping’ sign instructs motorists to keep moving and must not stop at any time, not for a minute, not for a second, not for a jiffy, on the road or in an area to which the ‘No Stopping’ sign applies

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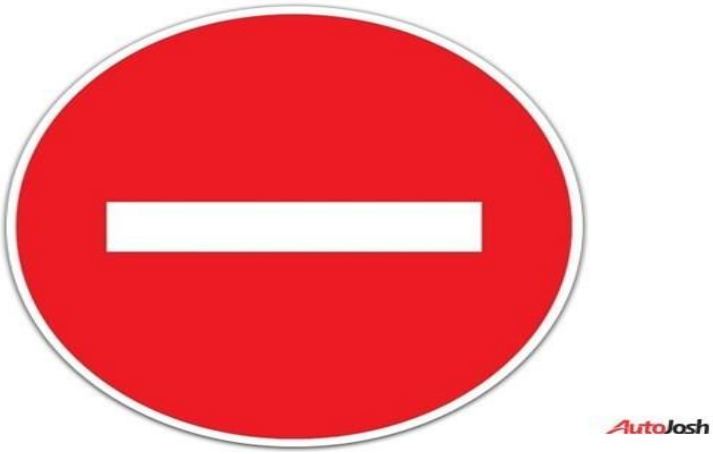
This signs is used to indicate that there is no entry for vehicular traffic. It is placed at the exit of some roads to inform motorist that they cannot drive into that road. It is often used at intersections to roads with one-way traffic.



No Stopping

A ‘No Stopping’ sign instructs motorists to keep moving and must not stop at any time, not for a minute, not for a second, not for a jiffy, on the road or in an area to which the ‘No Stopping’ sign applies.

No Waiting

Just like the "No Stopping" sign, this sign is placed along roads or streets to instruct drivers to keep driving or keep their vehicles in motion and not to stop. The difference is that, this signs allows a motorist to stop – to drop off or pick up a passenger, etc. Staying longer than necessary can be viewed as "waiting" or violation of the No Waiting instruction.

No Overtaking

This sign is typically placed on two-way roads that are too narrow or are too risky for vehicles to attempt to overtake vehicles ahead of them. They are also placed at bends, dips in the road or where there are trees.

3.2.2. Warning Signs

PED Xing

This sign is one of the most confusing road signs that motorists come across in Nigeria. However, it is better understood when represented in its pictorial form. It actually means, "Pedestrian crossing". This sign is often placed ahead of or near zebra crossings.

Sharp Deviation of Route or "Chevron" Sign

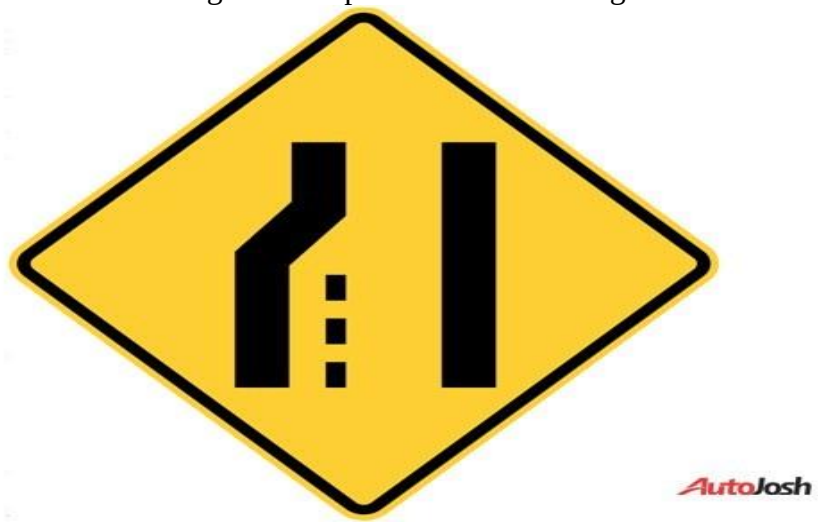
The chevron sign is positioned to warn motorists of a suden change in traffic direction. That is, they are positioned at places where traffic makes a sudden change in its course or direction , such as bends in the road or at round about. The chevron pattern pointing in the direction that traffic has to turn.

Lane Merge Left

This signs warns motorist that the lane that they are on narrows as they drive ahead. And such narrow end merges with a parallel lane to the left.

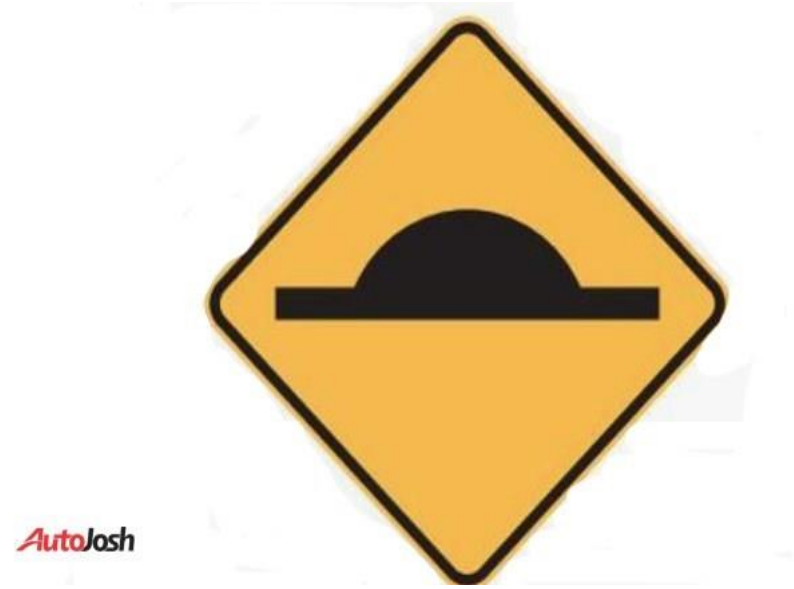
Lane Merge Right

This signs warns motorist that the lane that they are on narrows as the y drive ahead or as it ends. And such narrow end merges with a parallel lane to the right.

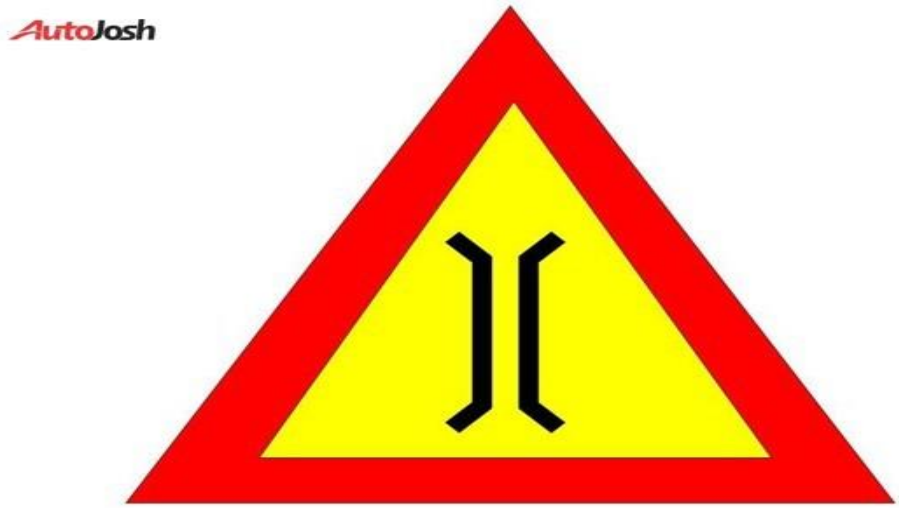


Bumps Ahead

This sign is used to warn motorists that there is a bump ahead or an uneven road surface on the road. This warning is intended to get motorists to reduce their speeds at certain points.



Narrow Bridge Ahead
This sign is placed ahead of a location where there is a narrow bridge. This sign is intended to get motorists to reduce their speed and drive cautiously as they approach the bridge.

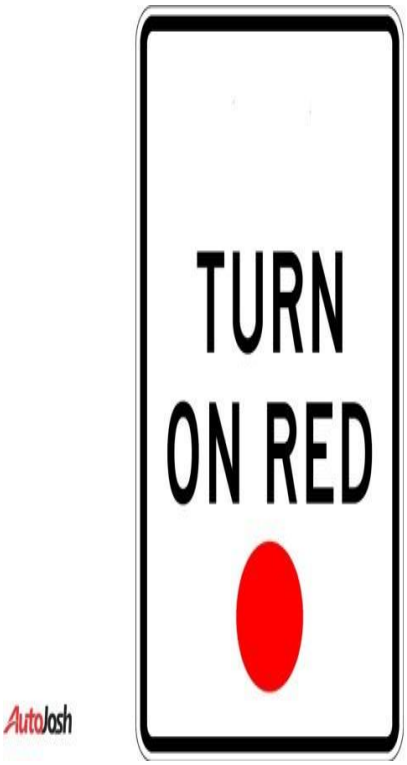


Dangerous Turn Left
This signs warns motorists that the road ahead is about to turn sharply in the direction of the arrow, in this case, to the left.

3.2.3 Information Signs

Turn On Red

This sign is placed at intersections where there are traffic lights. This sign generally permits vehicles to make a right turn even when the traffic light is on red. In other words, this sign gives permission to vehicles to turn into the next junction on the right nearer to them, even when the traffic light is showing a red signal and without having to wait for a green signal.

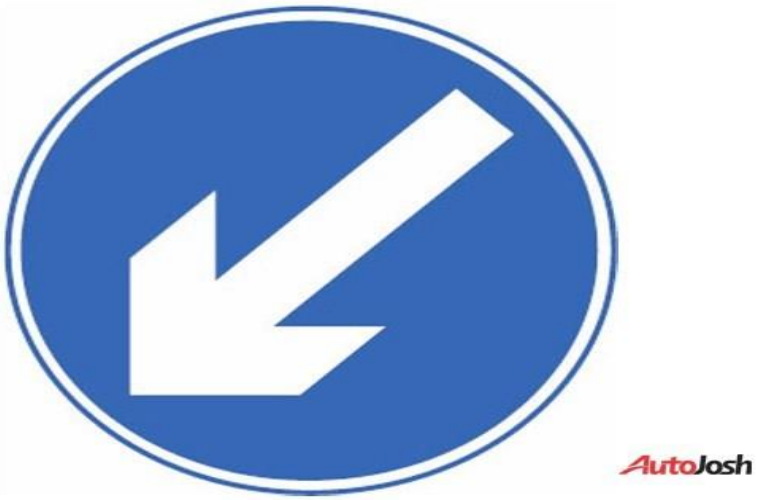


Keep Right

This sign instructs motorists to keep to the right side of a two-way road. Driving into the left side of the road is a violation of this traffic instruction.

Keep Left

This sign instructs motorists to keep to the left side of a two-way road. Driving into the right side of the road is a violation of this traffic instruction.



Pass Either Way

The sign informs motorists that they can pass either side of a diving road to reach the same destination or different directions.

Box Junction

A box junction is a road traffic control measure designed to prevent congestion and gridlock at junctions. The surface of the junction is typically marked with a crisscross grid of diagonal painted lines (or only two lines crossing each other in the box). Vehicles are not permitted to enter the area so marked unless their exit from the junction is clear, or they are intending to turn right and are prevented from doing so by oncoming traffic, or other vehicles on the box waiting to turn right.

Narrows Road Ahead

This sign informs motorists that as they drive on the road, the road narrows ahead of them.

3.2.4. Guidance Signs

Direction Sign (at a junction)

Direction Sign (in advance of a roundabout)

Fingerboard

Direction Sign (at a junction) - Local Roads

Final Turn Sign
Tourist Destination

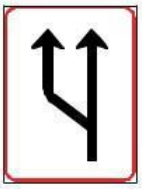
Hospital First Aid Police

GFS Services & Attractions (examples)

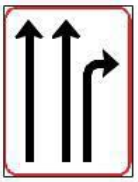
Town Name

River Name

Left-hand lane ends



Lane added on left-hand side



Lane pre-selection sign

Discussion

Case Studies

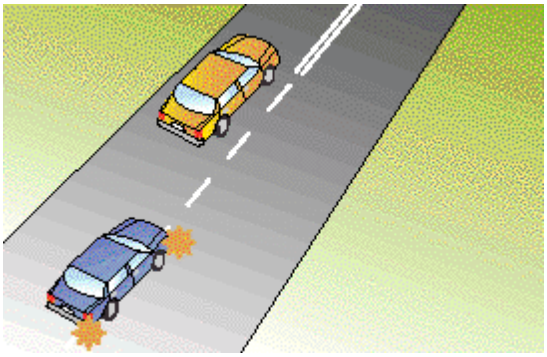
In-Text Question(s)

Copy and paste the icon in the place they are required for use

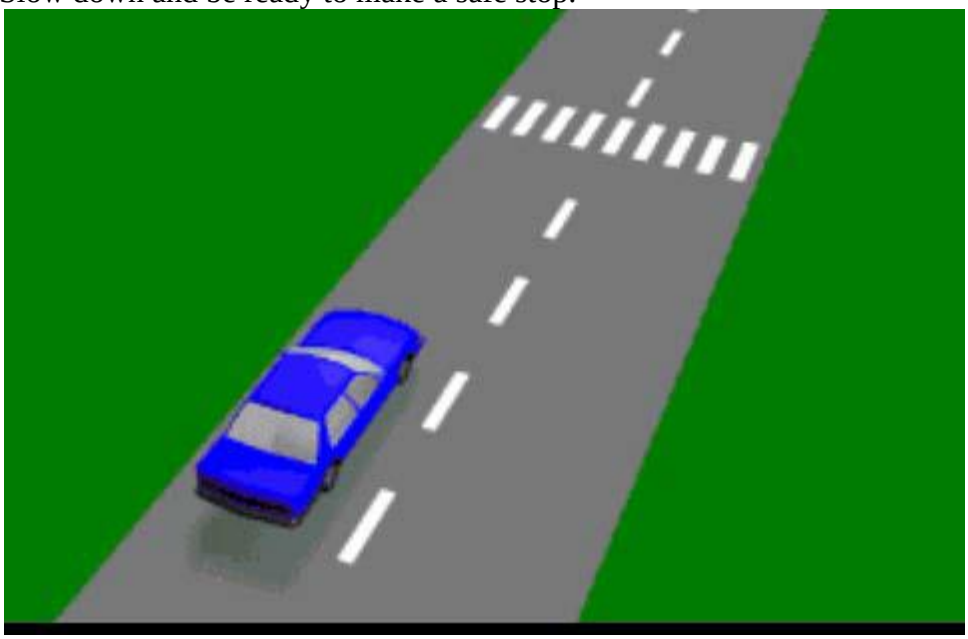
4.0 Self-Assessment Exercise(s)

1. Prohibitory Signs means --------, ---------- and----------
    a. ANS No Parking, 'No Waiting' and 'No U turns'
2. Example of Danger Signs is (a) long grade (b) no Parking (c) no Waiting' (d) no U turns'. ANS A

3. Regulatory signs with red circles means (a) mandatory signs (b) Danger Signs (c) Narrow Bridges (d) prohibitive signs
    a. ANS D
4. Informative Signs are usually ---------- in shape (a) narrow (b) triangular (c)rectangular(d) circle. ANS: C
5. The lines that are painted on the road for protection to separate traffic or to preven traffic from turning left is known as ---------- (a) Diagonal Lines (b) Zebra Lines (c) Lanes (d) Changing Lanes. ANS: A
6. When traffic in opposite directions are completely separated from each other, it is sometimes known as ---------- ANS: Expressway
7. Traffic holdup also known as…….. ANS: Traffic jams



A. Continue to overtake because you started when the line was broken.
B. Keep overtaking and cut in in front of the other car as soon as possible.
C. Do not overtake because you are not permitted to overtake on double lines
6. When approaching a marked pedestrian crossing and no pedestrians are in sight, you should -
A. Come to a complete stop before the crossing. B. Go faster, in case a pedestrian step onto the crossing C.Slow down and be ready to make a safe stop.



5.0 Conclusion

Human kinetics students need to understand various traffic sings and their purposes. Traffic signs do the work of regulatory where a driver that goes against such signs will be penalized, whereas some are for wirings and a careful driver will not land himself in the trouble.

6.0 Summary

You have learnt in this unit that traffic road signs can be found either side of the road or on the road with the purpose of doing the work of regulatory, warning, information and lastly guidance.

7.0 References/Further Readings

Federal Road Safety Commission (1997), Highway Code.

https://autojosh.com/18-common-road-signs-that-most-motorists-in-nigeria-dont-know-their-meanings

Module 3

Module Introduction

In this module you will learn about safety, safety culture, health and safety, distractions, alcohol, drugs and medicine, safety equipment, self-inspection of vehicles and observation. All these will be taught under the topic safety precaution in driver education. It is an important aspect of driver education, therefore you are advised to take the lesson to heart.
Road users, be it drivers or passengers including pedestrians are supposed to be acquainted with causes of road accidents. In this module you will be taught the meaning of road accidents, phases of road accidents, causes of road accidents and lastly safety rules. I believe at the end of the lessons you will appreciate that most of the factors causing road accidents are preventable by drivers. The module will be presented in units as follows:

Unit 1: Safety Precaution in Driver Education.
Unit 2: Road Accidents and Their Causes
Unit 3: Prevention of Road Accidents

Unit 1: Safety Precaution in Driver Education

Contents

7.0 References/Further Readings

1.0 Introduction

The course covers elements that compose safe driving and an overview of the highway transportation system. Emphasis is placed on human performance, traffic engineering and related research. The course is intended for driver education instructors and for those whose responsibilities include motor fleet safety. Due to extensive course content, students can expect considerable out-of-class assignments.

2.0 Intended Learning Outcomes (ILOs)

By the end of this unit, you will be able to:

Describe the meaning of safety
Explain safety culture and how to built it in an organization
List Road safety rules
Explain the relationship between health and safety
Explain the role alcohol, drugs and medicine in road accidents

3.0 Main Content

3.1 Defining Safety

The term "safety" describes a condition where adverse events and hazards are avoided, and barriers are erected to prevent future occurrences or interactions with such events or hazards. In the workplace, safety can describe the act of avoiding being the victim of or the cause of "*accidents."*

3.1.1Safety Culture: Definitions and Applications to Driver Education

The norms, attitudes, values, and beliefs of organizations define the culture of an organization and are manifested in the behaviors of its agents. For many organizations, safety and loss prevention are of the highest concern. This is especially true for organizations that operate in and/or create hazardous environments as part of typical business operations.

Definition of Safety Culture

Uttal (1983) defines organizational culture and, intuitively, its relationship to safety as follows:

Shared values (what is important) and beliefs (how things work)that interact with an organization's structures and control systems to produce behavioral norms (the way we do things around here).

National Safety Council (1998) profers some organisational actions and functions to build a safety culture within an organization. These include:

- Recognize, evaluate, and control hazards;

- Design and engineer safe workplaces;
- Manage safety performance;
- Manage regulatory compliance;
- Address occupational health;
- Collect safety-related information;
- Incorporate and involve employees at all levels;
- Motivate employees and positively modify their behaviorand attitudes;
- Train employees and orient them with new procedures andequipment;
- Communicate safety-related information;
- Manage and control external exposures;
- Manage external environments;
- Integrate safety into hiring and placement processes; and
- Measure the performance of safety-related activities.

3.2 Health and Safety

Health refers to your physical and mental wellbeing. It is important that at all times you make choices that will not interfere with your wellbeing. Any road user is more likely to make better judgment if they are in good health. The following are some of the issues that may interfere to ride safely

3.2.1Eyesight and vision

- Check your eyes. If you need spectacles to meet the required eyesight standard, ensure that you wear them before starting any journey
- It is dangerous and risky to ride with uncorrected defective vision
- Do not wear sunglasses or tinted helmet visors at night or in conditions of poor visibility

3.2.2.Fatigue

Fatigue is extreme tiredness as a result of mental or physical exertion. Do not start a journey if you feel tired

The following may cause fatigue:

- Insufficient sleep or rest
- An extended length of time performing the same task
- Sleep disorders and other illnesses
- Driving at the time of day when you are usually resting or sleeping e.g. night driving, early morning driving

Fatigue decreases your ability to make the right decisions, to avoid driver fatigue;

- Get quality sleep before driving
- Take regular breaks when driving over long distances
- Eat balanced meals at regular intervals
- Keep fit and healthy
- Avoid driving or riding your motorcycle at night. This is when you are likely to feel sleepy
- If you feel tired, stop at a safe place and rest

3.3Distractions

Distractions in driving can be described as anything that reduces your ability to respond as quickly as you should during an emergency. For this reasons some of these ordinary activities are prohibited for drivers.

3.3.1Using hand held devices

Statistics indicate that the accident rate is significantly reduced when motorists refrain from using hand held devices. As a safety precaution, it is best to switch of phones so that ringing phone is not a distraction. Alternatively, it is good to put the cell phone or other devices out of reach for the duration of the journey.

3.3.2.Radio

It is fine to listen to the radio while driving but refrain from adjusting the volume, changing CDs or Mp3's while driving.

3.3.3Grooming, smoking, and eating:

Though these may be seen as fairly simple tasks, they are distracting. Do these before or at the end of the journey.

3.3.4. Video devices:

These should not ever be placed in the driver's area of vision. Passenger sitting in the rear can have these but the volume must always be controlled to ensure that it is not distracting you as the driver.

3.3.5. Communicating with passengers and other drivers: Any of these can cause the motorist to lose focus.

GPS units:

It is always best to get directions for your destination before starting the journey. A GPS unit is an electronic device used to help the driver navigate through the road to the desired destination. The driver should always set the device before starting the journey.

Carbon monoxide poisoning: Carbon monoxide is an odourless gas emitted in the exhaust fumes. It can be lethal. For this reason, it is important to always check the exhaust system for any leakages. Never run the engine in an enclosed space and if you feel drowsy while driving, stop the car and get out for some fresh air.

3.4Alcohol, Drugs and Medicine

- Alcohol and certain drugs will affect your ability to drive your vehicle
- Do not drink and ride your motorcycle or drive.
- Some of the effects of alcohol are as follows;

i. Alcohol slows down your brain functions. This affects your ability to respond, make decisions or react quickly
ii. Alcohol reduces your ability to judge how fast you are moving or your distance from other cars, people or objects
iii. It gives you false confidence – you may take greater risks because you think your driving is better than it really is
iv. It makes it harder for you to concentrate and pay attention to various details in traffic
v. Alcohol also affects your sense of balance

- Should you choose to drink alcohol, designate a non-drinking driver, take a taxi home or use public transport?

- Only accept a lift if you are certain the driver has not been drinking or using other drugs
- Do not take medicine which causes drowsiness if you intend to use the road
- Do not ride your motorcycle or drive if you are unwell

Litter
- Do not discard litter on the roads
- Litter can be a hazard to you and other road users
- Always dispose off litter in the dustbin before or at the end of your journey

Road Rage and other forms of aggression
- Be courteous on the road
- If another road user provokes you do not retaliate

Prevention of theft
When you leave your vehicle:
- Switch off the ignition and remove the keys
- When you park your vehicle ensure that it is appropriately secured to reduce the risk of theft
- Lock all windows and the car boot

Limitations in Number of Passengers and Quantity of Goods
Do not carry more than the legally allowed number of passengers or weight of goods.
- When loading the vehicle items should be as low as possible and as close to the centre of the vehicle as possible
- Do not put items on the roof unless you have a designated luggage compartment for this purpose.
- Do not overload the vehicle.
- Check the tyre pressure to ensure that the tyres can handle the weight of the vehicle. When tyre pressure is too high or too low the vehicle will be unstable.

3.5Safety Equipment
All motorists should have certain safety equipment that could be used in case of an emergency

3.5.1.Equipment and Functions
Reflector Triangle: All motor vehicles (excluding motorcycles) should have these at all times. The reflector should be used when the motor vehicle for any given reason stops on the road. These should be placed 60 metres ahead and 60 metres behind a disabled vehicle.
Safety Belts
- All passengers must wear safety belts at all times no matter how short the distance being travelled
- You must fasten your safety belt correctly
- Use appropriate child restraints for children e.g. a booster seat is recommended for children under 12. A booster seat is designed to enhance safety by ensuring that vehicle seat belt fits properly.

Question
What are things that can interfere with driving safely?
First aid kit: A fully equipped first aid kit should have the following items - gauze dressings, triangular bandages, rolled bandages, safety pins, disposable sterile gloves, tweezers, scissors, alcohol-free cleansing wipes, sticky tape, antiseptic cream, painkillers

such as paracetamol, antihistamine tablets, distilled water for cleaning wounds, eye wash and eye bath.

Tools Box: Tools such as a jack and spanner can be used to do minimal repair when the vehicle is disabled Fire Extinguisher. This enables the motorist to deal with fire emergencies. Ensure that the fire extinguisher is inspected regularly to ensure that it is good working condition.
Fire Axe:In the event of a fire, the fire axe is a handy tool to rescue passengers.
Tow ropes.This rope is reinforced to handle the weight of the car and can be used to tow vehicles in case of a breakdown.
Spare tyre: It is important to have an inflated spare tyre and restore the deflated tyre back as soon as possible. This tyre should be inflated.
Jumpstart Cable: The jumpstart cable is used to reignite the engine.
Survival Gear:This is particularly important for motorists operating in places with extreme conditions such as extreme cold, extreme heat and rough terrain that is likely to damage the car. Survival gear may include blankets, a torch, a small supply food and water.

List item in car first aid box

3.6. Self-inspection of Vehicles

Before embarking on a journey, any responsible driver should ensure that the vehicle is in the right condition for the journey. Self- inspection refers to checking on different aspects of the motor vehicle to ensure that it is safe to use. Self inspection allows the driver to know what maintenance or repair work ought to be done. Self-inspection should also be done at the end of the journey so that the driver or vehicle owner can plan for any repairs.
Self- inspection is divided into two parts.

- Exterior inspection
- Interior Inspection

It is also important for the driver to know the common anomalies that may occur during long distance travel.

3.6.1 Exterior Inspection
This is the inspection that the driver of the vehicle undertakes before starting the journey. There are various vehicle components that should be inspected before driving off. These are:

1. Tyres
2. Reflectors and lights
3. Mirrors

4. Windshield Wipers
5. Windows
6. The Body
7. Cleanliness
8. Safety Belts
9. Emergency equipment
10. Paperwork

.1. Tyres Safety Check

It is important that the vehicle tyres are always in good condition. When tyres are in good condition, the driver is able to brake properly and to turn corners with ease.

- Give your tyres a visual inspection before and after every journey
- Small stones wedged in the tread can cause problems later
- Ensure that tyre treads are in good condition. Replace aging tyres
- Ensure that the tyres are securely fastened
- Check the tyre pressure
- Recognize the danger of underinflated and overinflated tyres. Both are harmful to the tyre
- Ensure you have a spare tyre that is in good condition

2. Reflectors and Lights

- Ensure that the headlights, turn signals, and hazard lights are operational
- Where possible, ask for assistance in checking the reverse lights since this can only be done when the vehicle is reversing

3. Mirrors

Make sure that all your mirrors are present, properly adjusted and unobstructed before driving the vehicle

4. Windshield Wipers

- The windshield wipers must work at all setting
- Make sure that you have wiper fluid

5. Windows

- Check all the windows, ensure that they can open and shut without difficulty
- Ensure that the roll up handle is functional

6. The Body

Inspect the exterior body for any damage such as dents and scratches.

7. Cleanliness

Ensure that the vehicle is clean. Make sure that the windscreen, windows and mirrors are clean for ease of navigation.

Ensure that your vehicle interior is clean and free of clutter to minimize distraction while driving and ensure that your passengers are as comfortable as possible.

8. **Safety Belts and Car Seats**
   - Inspect the safety belts to ensure that they are still functional i.e. the clasps should work correctly and the safety belts should be able to
   - The safety belts should be clean
   - If using special child safety seats or booster seats ensure that they are also in good condition and that when in use, they are properly secured.

   Question
   Identify inspection that the driver should undertake before starting journey.

9. **Emergency Equipment**

   - Ensure that your emergency equipment is still in good working order.
   - Emergency equipment includes the reflector triangle, a fire extinguisher, first aid kit, tools, spare tyre and survival gear

➢ 29

10. **Paperwork**

    Ensure that you have all that you as the motorist have the appropriate license that permits you to drive the car. Additionally, ensure that the vehicle is roadworthy and the correct registration and vehicle insurance.

3.6.2. Interior Inspection

It is important to carry out the interior inspection to ensure that the vehicle is mechanically sound.

The following are some of the parts that should be inspected

1. **Brakes**
   Ensure that the brakes are properly adjusted. To do this you may turn on the engine and do a few maneuvers.
2. **Steering**
   The steering wheel should have a full range of motion i.e. it should be able to turn at 360 degrees. It should also effectively turn the front wheels.
3. **Indicators**
   Inspect all indicators to make sure that they are operational
4. **Gears**
   Ensure that the vehicle is capable of shifting into any gear

3.7 Observation

Observation is essential for safe driving. Observation refers to using your sight and hearing ability to get a clear perception of what is around. The driver's ability to observe effectively is influenced by driver visibility.

3.7.1Driver visibility is the maximum distance at which a driver can clearly identify objects around the car. Driver visibility varies for each driver depending on the type of vehicle, the traffic conditions and the individual's own ability to see. To enhance driver visibility it is important to make use of all the mirrors in your vehicle.

- Check the mirrors by looking into the centre interior mirror, followed by the door mirror of the direction you are going.
- Take one of what is reflected through the mirrors. Look for potential hazards such as vehicles driving closely behind you, vehicles approaching quickly from behind,

motorcyclists and cyclists. Potential hazards may require further mirrors checks to eliminate the possibility of turning into actual hazards.

- If approaching a situation where you need to stop or slow down, special actions may need to be taken. A vehicle driving too closely behind may require that you gently slow your car down earlier than usual to provide the driver behind with more reaction time to slow down
- A vehicle approaching quickly behind may require that you slow down slightly later than usual (if possible) to allow the driver with a greater stopping distance.
- Motorcyclists and cyclists are often in the habit of pushing forward past slowing vehicles to reach the front of a queue. Such potential hazards require that you use all the mirrors to establish their location and checking the blind spot is extremely important.

3.7.2Mirrors in your car

The blind spot is the area around the vehicle that the driver cannot directly observe while driving. The blind spot varies according to the type of vehicle and the driver.

Mirrors are placed at different parts of the vehicle to assist the driver to get a clearer view of what is around the vehicle. The mirrors eliminate or alleviate the vehicle blind spot.

- The blind spot should be checked before changing direction when:
- There are motorcyclists or cyclists close by
- You are overtaking on a dual carriageway
- You wish to change lanes
- You wish to change lanes or direction when there is a potential hazard

Types of mirrors

1. Rear View Mirror (Interior mirror)

- These are made with flat glass and do not give a distorted image of what is reflected. This makes it possible to judge the speed and distance of following traffic
- You should only adjust this mirror when the vehicle is stationary
- You should be able to view the whole of the rear window in the interior mirror
- At all times when stopping, opening doors and when entering the main roads

2. Exterior Mirror

- These are convex mirrors, which are made using curved glass
- Convex mirrors give a wider field of vision but this make judging the speed and position of following traffic more difficult
- Vehicles appear smaller and further away than they actually are.

You should adjust the exterior mirrors so that you can get the best rear view with minimal head movements

- The horizon should appear in the middle of the mirror
- Nearside Mirror. This is the one that’s closest to the kerb
- Offside Mirror. This is the one closest to the inner lane marker

4.0 Self-Assessment Exercise(s)

1. Are you allowed to use a hand-held mobile phone while driving a car? A. Yes, but only when you stop at intersections. B Yes, but you must hold the steering wheel with at least one hand. C.No

2.To drive safely, you need to concentrate and be able to monitor everything that is happening on the road. To do this, you need to –

A. Turn all your attention only to the road ahead.

B.Ask other occupants in the vehicle to watch out for possible dangers.

c. Continually scan the road, looking ahead, to the sides, checking side and rear mirrors and anticipates what may haapen

3. To reduce the effect of alcohol before driving or riding you should . A.Wait. The time depends on how much you have drunk.B. Drink black coffee.C.Have a glass of water.

4. Before driving a motor vehicle or riding a motor cycle it is safest . A. Not to drink any alcohol

B. Drink 1 nip of spirits (30 ml or 1 oz).C. Drink 1 middy (285 ml) of light (low alcohol) beer.

5. A car is carrying a driver and 3 adult passengers. There are seat belts in all seating positions. By law, seat belts must be worn by – A. All four people. B. Only the driver. C.Only the driver and front seat passenger

6 You are driving a vehicle that only has a seat belt for the driver. To reduce the danger of being in a vehicle without a seat belt, where is the best place for passengers to sit?A In the front seat B In the front seat sharing your seat belt. C.In the back seat

7. What should always be kept clean on your vehicle? a. Lightsb. Reflectorsc. Windows d. Screens

8. Wearing Seat belt is a. Mandatory b. Regulatory c. Fashion d. Show off

9. On a long motorway journey boredom can cause you to feel sleepy. a. leave motorway and find better place for stopping b. look for a landscape c. drive fastly to finish travel d. fresh air entrance should be initiated

10 When is a driver allowed to drive without seatbelt a. While reversing a vehicle b Age 65 years and above cWhen the driver is gregnant d. all of the above

11. During driving use of mobile is a a. Violation of traffic lawsb. Allowed in emergency c. Allowed with speaker on d. All of above

12. Reading or sending SMS is allowed while driving a. No b. Do not know c. Yes d. Below the speed of 80 kmh

13 Driving and smoking has no harm on safe driving a. Wrong b. Right c. I don't Know d. None of them

5.0 Conclusion

Safety culture may in part address factors that include the behaviors of those operating on behalf of the carrier, adherence to government regulations on the carrier, and preparation for and avoidance of factors that cannot be greatly controlled. Driver education students have to imbibe the culture of safety by recognizing, evaluating and avoiding hazards. There is a relationship between health and safety, therefore a driver education student must avoid anything that will interfere with is safety such as fatigue, alcohol, drugs and medicine. To be safety conscious, a driver needs to avoid any distractions such as the use of handset, watching of video, communicating with passengers and the habit of eating. The use of safety

equipments such as seat belt and observation of any strange sound of movement around enhance our safety in driver education.

6.0 Summary

In this module you have learnt that health refers to your physical and mental wellbeing and that eyesight and vision and fatigue may interfere to ride safely. You have been told that distractions in driving can be described as anything that reduces your ability to respond as quickly as you should during an emergency and that using hand held devices, radio, grooming, smoking and eating, video devices and communication with passengers and other drivers are prohibited for drivers.

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Unit 2: Road Accidents and Their Causes

Contents

1.0 Introduction

Road traffic accidents have been a major issue to both developed and developing world today. One of the major concerns of any nation's transportation sector is how to curb road traffic accidents in such a country. The growing number of deaths and injuries as a result of road traffic accidents is a global phenomenon that all countries of the world are grappling with. According to World Health Organization as cited by Aderamo (2012a), road traffic accidents and deaths are a global disease sweeping through the world gradually. In this unit, you will learn about the meaning and causes of road accident.

2.0 Intended Learning Outcomes (ILOs)

By the end of this unit, you will be able to:

- Explain the Meaning of road accident
- Describe the Causes of road accidents
- Analyze the Consequences of disobeying traffic rules and regulations
- List Road safety rules

3.0 Main Content

3.1 Road Accidents

Road traffic accidents occur when a vehicle collides with another vehicle, pedestrian, animal, road debris, or other stationary obstruction, such as a tree or utility pole (Road traffic Accident,2013). Worldwide, road traffic accidents lead to death and disability as well as financial cost to both society and the individual involved. Road traffic accidents occur worldwide but the incidence is more in developing countries due to bad roads and negligent nature of road users. Annually, it causes about 1.2 million deaths globally. Road traffic accident is a leading cause of death in adolescents and young adults worldwide. Majority of mortalities and morbidities occur in developing countries(Odero W, Garner P, Zwi A,1997) .

In Nigeria, trauma is the main reason for emergency roomvisits and road traffic accidents are responsible for the majority of deaths(Elechi EN, Etawo SU,1990). The overall road traffic injury rate is about 41 per 1000 population andmortality from road traffic injuries is about 1.6 per 1000 population .This is significant due to the fact that majority of these injuries and deaths can be prevented. It becomes worrisome with the fact that the incidence is increasing (Oluwasanmi AJ.1993)

3.2 Phases of Accidents

According to Afolabi and Gbadamosi (2017), the critical evaluation of accident phenomenon clearly indicate three specific phases. The three phases is the total consumption of an accident at any point when it is record. The phases as a matter of fact are interwoven and occur sequentially after each other. These phases are Pre-Accident phase, the Accident phase, and the Post-Accident phase of highway safety.

Pre-Accident Phase:-The pre-crash phase groups together all preventive or precautionary measures aimed at controlling or abating road accidents. Under this phase, fall all the contributory factors like the environment, the vehicle, the road users/persons, and the

preventive or precautionary measures taken to normally avert accident. It is an indication of several conditions that are capable of causing accident. In other words, it implies all situations and circumstances preceding the occurrence of an accident. We can as well evaluate certain conditions that are capable of causing an accident before they are recorded. In short, this phase is concerned with Accident avoidance.

The Accident Phase:-Once the pre-crash phase cannot be averted, the crash phase is the actual occurrence of the accident, when the mechanical device is involved in actual collision resulting in an accident.In this phase belongs the type of outcome from the accident to the victim. Similarly, the spot at which the accident occurred and the time of the day are all major indices of the crash phase.
The following actions should be taken during road traffic accident:
Assess the Situation:-

- Locate the victim
- Examine the victims quickly
- Prevent further risk of fire, explosion, road traffic
- Keep the vehicle stationary
- Switch off engine, fuel and battery connection
- Display warning signals
- Send for help.

Care of the Victim:-

- Rescue the trapped casualties
- Look for breathing, heart function and consciousness
- Care for unconscious cases first
- Take care of bleeding and fractures
- Use car first aid kit if available
- Transport the casualty to nearest hospital.

Care of the Vehicle:-

- Keep the vehicles immobilized and in safe custody
- Protect the property from damage
- Take help of local people
- Inform police.

Post-Accident Phase:-The post-crash phase can be described as the process of evaluating or assessing the consequences of road accidents. Such evaluation is based on socio-economic, environmental and political effects, using quantifiable and qualitative analytical tools. In these phase, we are concerned with saving those who need not die, with reducing hospitalization, permanent disability and unnecessary deaths. Indeed, the focus is on accessibility to adequate and prompt emergency communications, transportation and medical care, that determine the livelihood of the continuing survival of the survivors of the crashes. Therefore, the concern of this phase is on severity reduction, which would include the availability and competence of ambulance drivers and attendants in handling victims at accident scenes and the receptivity of hospital staff to accident victims who are not accompanied by police officers.

Question
List accident phase.

3.3. Causes of Road Accidents

The causes of motor vehicle collisions are complex, but broadly depend on characteristics of drivers. Skill level (McGwin& Brown, 1999), inexperience (McCartt, Shabanova and Leaf, 2003), and risk taking behaviors (Rolison, Hanoch, Wood and Pi-Ju, 2014) have been implicated in the collisions of young drivers compared to drivers in other age ranges. Investigations of vehicle collision records have also implicated excessive speed (Gonzales, Dickinson, , DiGuiseppi, Lowenstein, 2005; Lam, 2003), driving recklessly (Lam, 2003), and traffic violations (Gonzales et al., 2005) as well as drugs and alcohol (Bingham, Shope, and Zhu, 2008) in the collisions of young drivers.

According to Lum and Reagan (1995) the causes of road traffic accidents are multi-factorial. These factors can be divided broadly into driver factors, vehicle factors and roadway factors. Accidents can be caused by a combination of these factors. Driver factors solely contribute to about 57 per cent of road traffic accidents and 93 per cent either alone or in combination with other factors.
In the same vein, the causes of road traffic accidents depend on a list of factors which can be broadly divided into four: They are as follows (Agbonkhese, Yisa, Agbonkhese, Akanbi, Aka, and Mondigha, 2013)

(i). Vehicle operator or driver factors
(ii). Vehicle factors
(iii). Road pavement condition factors
(iv). Environmental factors.

Road traffic accident can be caused by a single factor or a combination of these factors. Most safety studies come to the conclusion that vehicle operator or driver factors (or human error) are the main cause of accidents.
3.3.1Driver factors in road traffic accidents are all factors related to drivers and other road users. This may include driver behaviour, visual and auditory acuity, decision making ability and reaction speed. Drug and alcohol use while driving is an obvious predictor of road traffic accident, road traffic injury and death. Speeding, travelling too fast for prevailing conditions or above the speed limit, is also a driver factor that contributes to road traffic accidents. The risk of being injured increases exponentially with speed much faster than the average speed. The severity of injury depends on the vehicle speed change at impact and transfer of kinetic energy. Though vehicles travelling slower than average speed are also at increased risk of road traffic accidents, most involve speed too fast for the condition.
However, unlike the findings of TRACE, in Nigeria, studies and road traffic accident records have clearly shown that the attitude of the Nigerian driver to driving code and etiquette is the single most important contributing factor as driver factors solely contributes to about 57 per cent of road traffic accidents and 93 per cent either alone or in combination with other factors.
Driver-related issues include:
(a). Speed and indiscriminate use of Sirens
An increase in average speed is directly related both to the likelihood of a crash occurring and to the severity of the consequences of the crash. Travelling too fast for prevailing conditions or above the speed limit contributes to road traffic accidents.

The risk of being injured increases exponentially with speed much faster than the average speed. The severity of accident depends on the vehicle speed change at impact and transfer of kinetic energy. Though vehicles travelling slower than average speed are also at increased risk of road traffic accidents ,most involved speed too fast for the conditions.

The indiscriminate use of Sirens coupled with very high speed rates by private or political public office holders such as bank vehicles' drivers' or government vehicles' drivers' has been reported to cause a lot of road traffic accidents in Nigeria.

(b). Drink–driving and use of drugs

Drinking and driving increases both the risk of a traffic accident and the likelihood that death or serious injury will result. The risk of being involved in a traffic accident increases significantly above a blood alcohol concentration (BAC) of 0.04 g/dl. Doctors often advise patients to abstain from driving vehicles or operation of machineries while under certain drugs as these drugs are known to cause side effects of sleepiness and fatigue

(c). Distracted driving

There are many types of distractions that can lead to impaired driving, but recently there has been a marked increase around the world in the use of mobile phones by drivers that is becoming a growing concern for road safety. The distraction caused by mobile phones can impair driving performance in a number of ways, e.g. longer reaction times (notably braking reaction time, but also reaction to traffic signals), impaired ability to keep in the correct lane, and shorter following distances. Text messaging also results in considerably reduced driving performance, with young drivers at particular risk of the effects of distraction resulting from this use. Drivers using a mobile phone are approximately four times more likely to be involved in a traffic accident than when a driver does not use a phone. Hands-free phones are not much safer than hand-held phone sets as they too have been recorded to result in traffic accidents when shocking news is received while driving.

(d). Inexperience and unqualified drivers

Majority of Nigerian drivers do not possess the right authorization from government authorized agencies like the Federal Road Safety Commission, FRSC and are unqualified before driving cars on road pavements. This is the major reason most Nigerian drivers are ignorant of highway codes or traffic orders. They put their lives and those of other road users at the risk of traffic accidents. As a result of their inexperience, since they were never given any tutorial or taught how to use their vehicles on highways by government accredited driving schools, their decision making ability and reaction speed to traffic is bad.

Question
What are the causes of road accidents

(e). Nonuse of safety device and negligence of duty by government established agencies

Research had demonstrated that up to 80% reduction in deaths of drivers and passengers can be achieved through the use of safety belts alone. The focus of this second phase, therefore, is on injury prevention.

Seat belts are safety device provided to safeguard a driver in the course of an accident. The use of vehicle seat belts also helps to ensure that the driver is in an upright and comfortable position thus enabling him/her to proper operate the vehicle. However, this provided safety device has been grossly abused thus increasing the risk of fatality among front-seat and of rear-seat passengers. Also majority of motorcyclists or their passenger do not wear helmets while plying the road thus exposing themselves and indeed other road users to road traffic accident.Officials of government agencies such as the FRSC and Vehicle Inspection Office, VIO do not help matters as they have been seen to take their duties for granted by just being mere spectators each time they come across a driver or passenger not wearing seat belt, a driver using mobile phone while driving or a motorcyclist and passenger not wearing helmets.

3.3.2Vehicle factors can be divided into vehicle design and vehicle maintenance. Some safety features of vehicles like seatbelts and airbags are likely to reduce the risk of death and serious injuries. A well-designed and maintained vehicle is less likely to be involved in accidents. If the brakes and tires are good and the suspension well-adjusted, the vehicle is more controllable in an emergency and thus, better equipped to avoid accidents.

The vehicle itself is a key factor when analyzing the remote causes of a traffic accident and it is incorporated with gadgets like, the horn, side mirrors, wipers, braking system, trafficators, headlights and break-lights (to mention just a few) so as to avoid road accident. Malfunction of any vehicle parts such as tyres, engines, braking systems, light systems can cause road traffic accidents. The reliability of the vehicle is itself a function of the condition of vehicle at every given time. Vehicle components and vehicle maintenance are the two main conditions which affect vehicle factors as it relates to causes of road traffic accidents.

3.2.2.1Vehicle Components

The assembled components of a vehicle working effectively uniformly or abnormally as a unit will determine the occurrence of a traffic accident.

(a). Vehicle Design

The specific maximum load designed for a vehicle in its entire ramification goes a long way towards determining its stability on the road surface. When vehicles are subjected to stress over and above the provisions of the design specifications as is the case of a lot of vehicles plying the Nigerian roads, deterioration for the condition of the vehicle in accelerated wear and tear sets in. Design defects affect the subsequent condition of the vehicle once it is put on the road and operated either normally or otherwise which may result to possible road traffic accidents.

(b). *Vehicle Brake System*

Brakes are generally applied to rotating axles or wheels. Vehicles use a combination of braking mechanisms which works jointly with the accelerator as the main synchronizer of the speeds of vehicles. Any malfunctioning of the brake sub-system should be taken very seriously as a potential source of unavoidable accident.

(c). *Vehicle Body and Tyres*

The firmness of the structure of a vehicle though less prominent attributes to some measure in causing road traffic accidents. One of the dominant factor in determining the stability and safety of vehicles on the road is the tyres. Tyres designed and specified for cold regions are not those specified for temperate regions like Nigeria. However, this is not the case of most tyres used in Nigeria as vehicle owners do not take the specification of tyres into consideration when buying and fixing tyres onto their vehicles and this has been known to cause tyre raptures thus leading to traffic accidents. Some other tyre related causes of road accidents could be due to one or a combination of overinflated tyres, underinflated tyres, thread of tyres are thoroughly worn out.

(d). *Vehicle Lights*

The failure of vehicle light is a major factor in road traffic accident. Failure of vehicle lights has a tendency to misinform and mislead other road users thereby providing a good opportunity for an accident to occur. Vehicle lights are very useful at all times during the daylight, in darkness and in poor/bad weather. For example, a failed trafficator light of a vehicle ahead will not normally provide the usual warning to other vehicles behind that it is about to undertake a turning manoeuvre and if for instance the driver of the vehicle behind has not allowed for a sufficient stopping sight distance or the vehicle has a faulty brake sub-system, this could result in an accident occurring.

(e). *Vehicle Engine*

The power house and heart of the vehicle is the engine sub-system which is responsible for bringing other parts of the vehicle into motion and one whose sudden failure on a highway is more likely to cause an accident if the volume of traffic is sufficiently high at that point in time. Even when the traffic is reasonably low, mismanagement of the failure by an experienced driver could cause road traffic accident.

3.2.2.2Vehicle Maintenance

Acquiring a well-designed vehicle and putting it onto road use is not enough to prevent the vehicle from causing road traffic accident. Actually not performing routine maintenance and checks on the vehicle can lead to deterioration of the vehicle sub-systems and thus expose the vehicle to causing road traffic accident as a well maintained vehicle is less likely to be involved in accidents. For example, if the brakes and tires are good and the suspension well-adjusted, the vehicle is more controllable in an emergency and thus, better equipped to avoid accidents.

3.3.3Road design and maintenance is also a factor that contributes to road traffic accidents. The causes of road traffic accidents are not just human error or driver negligence. Unfortunately, Nigerian highways are arguably one of the worst and most dangerous in the world.

3.3.3.1*Road pavement condition factors*

Nigerian highways are arguably one of the worst and most dangerous in the world as they are often poorly designed, necessary important road facilities like drains are not adequately provided for and to top it up, they are rarely rehabilitated and are in dilapidated states. The deplorable states of the Nigerian highways create a scenario that makes vehicles and other road users susceptible to road traffic accidents. This further confirms that road traffic accidents are not just caused by human error or drivers' negligence.

3.3.4Environmental factors

Environmental related conditions such as fog, sunrays, mist and rain in no small measure contributes greatly to the rate of road traffic accident in Nigeria today. Having stated earlier that most vehicles on Nigerian roads are poorly maintained, a poorly maintained vehicle for example on a rainy day is most likely to cause road traffic accident if the wipers are faulty and not functioning as the driver will be unable to see ahead.

3.5. Safety Rules

When using the road, pay attention to your surroundings and stay alert whether you are walking, cycling, riding or driving a motor vehicle. Most accidents can be avoided when road users stay attentive.

3.5.1Some rules for observation include:

- Keep your eyes moving? Do not just focus on one angle
- Get a wide view of what is ahead and behind you. This allows you to create enough room between you and the other road users
- When driving or riding, make use of all mirrors; the rear view and wide view mirrors
- Pay attention to the vehicle instruments
- Ensure that other road users can see you
- Watch other road users and in particular for cyclists, motorcyclists and pedestrians
- When passing parked cars, watch out for opening doors and exiting passengers
- Give special attention to vulnerable road users such as children, elderly people and persons with disabilities
- Give special attention to users of non- motorized transportation such as horses, donkey carts, handcarts, bicycles and wheelchairs

4.0 Self-Assessment Exercise(s)

1. Define road accidents
2. Describe the phases of road accidents with examples
3. Highlight the factors contributing to road accidents
4. Individuals, government and environment are contributory factors to road accidents. Discuss
5. Highlight five ways of either preventing or limiting road accidents

5.0 Conclusion

Human kinetics students need to understand that road accidents occur due to various factors and that this can be in three phases such as pre-accidents, accidents and post accident phases. Driver factors such as driver behavior, visual and auditory acuity, decision making ability and reaction speed. Drug and alcohol use while driving is an obvious predictor of road traffic accident, road traffic injury and death. Speeding, travelling too fast for prevailing conditions or above the speed limit, is also a driver factor that contributes to road traffic accidents. All these contributed to about 57 percent of road accidents and this suggests that if these can be taken care of, there is a possibility of reducing road accidents to a certain degree. Also the vehicles itself, road together with environment are part of contributory factors to raod accidents. Observation of safety rules such the use of seat belt and by paying attention to your surroundings and staying alert whether you are walking, cycling, riding or driving a motor vehicle. Most accidents can be avoided when road users stay attentive.

6.0 Summary

You have learnt about reasons why FRSC was established and the move by the federal government in the prevention of accidents. You have also learnt about the causes of accidents and the major problems in accidents prevention in Nigeria.

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Unit 3: Prevention of Road Accidents

Contents

1.0 Introduction

In the event of road traffic accidents, there have been numerous methods of management, reduction and prevention. The use of traffic law enforcement agencies and associated organizations happens to be a major policy effort in accident reduction cases. Early attempts in the enforcement of road traffic regulations in Nigeria were limited to discrete and isolated attempts by some states of the federation. Notably among the efforts to institute a formidable road safety program, was the effort of Shell Petroleum Development Company of Nigeria (SPDC) between 1960 and 1965. The effort of the Nigerian Army in the training of its officers and men on road safety in the early 1970"s also contributed to road safety idea and consciousness in Nigeria. The Nigerian Army started the first public road safety campaign in 1972 when it initiated an annual road safety week. The first deliberate policy on road safety was the creation in 1974 of the National Road Safety Commission (NRSC) by the then Military Government. The impact of the Commission was however, not sustained. In 1977, the Military Administration in Oyo State, Nigeria established the Oyo State Road Safety Corps which made some local significant improvements in Road Safety and road discipline in the State. This lasted till 1983 when it was disbanded by the Federal Government (FRSC, 2009).

2.0 Intended Learning Outcomes (ILOs)

By the end of this unit, you will be able to:

- Identify Institutions responsible for road safety in Nigeria and their functions
- Understand strategies put in place by government and international organizations to reduce road accidents rate in Nigeria

3.0 Main Content

3.1 Institutionalization of Road Safety Operations in Nigeria

Nigerian government has for long been making effort at tacking the issues of roads safety.Such interventions include making of relevant laws which began during the Military regime with the creation of Federal Road Safety Commission and include: ***Decree No. 45 of the 1988*** amended by ***Decree 35 of 1992*** referred to in the statute books as the ***FRSC Act cap 141 Laws of the Federation of Nigeria (LFN).***

- With the reintroduction of democracy, it became necessary to further legitimize the efforts initiated by the Military Administration. Hence, the Decree was passed by the Legislature (National Assembly) as **Federal Road Safety Commission (establishment) Act 2007. 88.**
- There has also been introduction of legislation on use of crash helmets by motor cyclists and mandatory use of seat belts among others.

Core Functions of the Federal Road Safety Commission (FRSC)

- Minimizing / preventing accidents on the highways.
- Clearing obstructions on any part of the highways.
- Making the highway safe for motorists and other road users.
- Recommending works and devices designed to eliminate or minimize accidents on the highways and advising the Federal and State Governments including the Federal Capital Territory Administration and relevant governmental agencies on the localities where such works and devices are required.
- Public enlightenment for Drivers, Motorists and other Members of the public on safety and discipline on the highways.

3.2 The Role Of The Federal Ministry Of Transportation (FMOT) In Road Safety Management

The FMOT is the Federal Government's key organ for developing policies on road safety.

- The Ministry ensures that all Conventions, Legal instruments, Agreements, treaties etc on transportation including those on road safety, for which the Federal Government is a contracting party are observed and implemented.
- To effectively carryout its responsibilities with regards to the road sub-sector, the Ministry recently sought for and obtained Government approval to create a Department of Road Transport and Mass Transit Administration.
- FMOT collaborates with other government organs and agencies in coordinating activities and programmes of government on road safety.
- Collaboration exists in organization of transportation safety programmes and projects with the Federal Ministry of Health, the Nigeria Police, Federal Ministry of Environment, Department of Road Transport Services / Motor Vehicle Inspection Office, National Automotive Council, Nigeria Institute of Transport Technology, Federal Ministry of Power, Works and Housing

In-Text Question(s)

3.3. Implementing the United Nation’s Decade of Action (DOA) on Road Safety in Nigeria.

In its realization that global road death and injury is a "***major public health problem with a broad range of social and economic consequences which, if unaddressed, may affect the sustainable development of countries and hinder progress towards the Millennium Development Goals***" , the UN General Assembly proclaimed the UN Decade of Action for Road Safety 2011-2020

- The Resolution on the Decade of Action (DoA)was co-sponsored by 100 countries including Nigeria .Officially launched on 11 May 2011, the Decade of Action has the official goal of **'stabilizing and then reducing' global road traffic fatalities by 2020” .**
- The Country is working assiduously to implement the Pillars of the DOA and has galvanized the relevant institutions to carryout the associated activities.

Strategic Actions Taken (By TheFmot) to Implement DoA

- Construction of new rail lines and resuscitation of old ones across the country which would minimize the use of motorized vehicles on Nigeria's roads.
- Introduction of the Road Transport Operators Manual, a policy document to regulate the use of Nigerian roads by Road Transport Operators.
- Partnering with the Private sector to Construct Transit parks and truck terminals for long distance drivers to rest in order to prevent exhaustion-induced crashes.
- Participation at the meetings of the UN Group of Experts road signs and signals by Nigeria in an effort to ensure compliance of the country with the UNECE /W. P1 ***1968 Convention on Road Signs and Signals*** ,which the country became Contracting Party since 2011. The rationale of focusing on road signs is that failure to adopt them is a major cause of road accidents.
- Encouragement of the Private Sector to involve more in provision of mass transit vehicles and water transportation for the public.
- Sensitization of Drivers on road safety issues through collaboration with Transport Associations and Unions.
- Collaboration with Abidjan-Lagos Corridor Organization (ALCO) to ensure coordinated enlightenment programmes of Truck drivers along the ECOWAS trade and transit corridors.
- On-going process of formulation of policy on Axle load to check overloading by vehicles.
- Developing Curriculum for Training of Drivers and Participating in such training by the National Institute for Transport Technology (NITT), an agency of the Ministry.
- Researching into road safety issues by the NITT .

Strategic Actions Taken (BY THE FMPW&H) to Implement DoA

The Federal Ministry of Power , Works and Housing is another key player in the effort to ensure the roads are safe through the following activities :

- Construction of roads and highways across the country .
- Repair of roads and highways through its Agency Federal Road Maintenance Agency (FERMA).
- Provision of weigh bridges along highways.

Strategic Actions taken (BY THE FCT)to Implement DoA

The Federal Capital Territory Administration also has carried out some activities and put in place policies to reduce accidents in Nigeria's capital including:

- Regular Vehicle inspection through the Vehicle Inspection Officers (VIO) .
- Provision of road signs and markings.
- Clearing of the roads of bushes that obstruct the view of Drivers especially during the rainy season.
- Construction of more foot bridges for pedestrians
- Restricting the operation and use of certain commercial buses from the city centre.
- Supporting the Private Sector on provision of computerized inspection equipment.
- Banning the operation of Motor cycles and tricycles from the city centre.

Strategic Actions Taken (BY THE FMH) To Implement DoA

- The country has achieved some significant milestones in the area of post –crash care of road accident victims as follows:
- Establishment of the National Trauma centre–a level 1 trauma centre at the National Hospital in the Federal Capital Territory.
- On-going process of developing policy on National Emergency Medical Services and National Emergency Ambulance Services.
- Formulation of policies to waive requirement of "Police reports" before treating of road crash victims.
- Establishment of Curriculum centres for formal training of Paramedics and other trauma experts in the hospitals across the country.
- Establishment of Organized Pre-hospitalized care and systems for rapid identification, extrication and evacuation of victims of road traffic crashes and provision of field hospitals, clinics and ambulances along major road corridors.

Strategic Actions Taken (BY THE FRSC) To Implement DoA

- Introduction of use of speed Limiting devices and enforcement of Speed limits.
- Establishment of a dedicated toll free number for victims of road crashes.
- Carrying out of periodic road safety audit.
- Establishment of National Data collection centre on road traffic crashes.
- Establishment of Traffic Emergency Response Centres on major highways.
- Introduction of Retro-reflective tapes for use by Toxic laden trucks and articulated vehicles on roads at night.
- Appointment of "Special Marshalls" from the public to secure more buy-in and interaction on road safety issues as well as heightened engagement with drivers at motor parks especially during festive seasons.
- Establishment of Zebra Rescue Groups.
- Identification and marking of "dark spots" with high incidences of road traffic crashes and clearing of road sides to ensure wider visibility by drivers and other road users.
- Introduction of National Driving Licence Standardization Scheme to check unqualified drivers handing steering wheels of vehicles .
- Reduction of response rescue time to victims of road traffic crashes from 2 hours to 15 minutes in most major road corridors .
- Inclusion of road safety in school curriculum at the primary , secondary and tertiary levels .

 Inclusion of road safety in National Youth Service Corps orientation programmes Coordination of the international day set aside on road safety.
 Accreditation of Driving Schools.

Question

What are the strategies employed to prevent accident.

Challenges

Despite the efforts made in tackling the problem of lack of adequate safety on Nigeria's roads, the problem still persists .The following challenges are noted :

 Need for modern equipment's to practically tackle the issues . Failure to sanction road traffic violators appropriately
 Insufficient funding to execute more projects and programmes especially those associated with the Decade of Action .
 Inadequate number of trained personnel to tackle the issues at both the policy development and implementation level .
 Multiplicity of Road safety -related agencies and depletion of available resources to maintain them.
 Insuffient cooperation among agencies working on road safety.
 Lack of supervision /coordination of road safety issues and agencies by the FMOT which should provide the needed policy direction.
 Insufficient political will especially at the level of States and Local Government administrations
 For achievement of the Ministry's target of 3Es (Efficiency , Effectiveness and Economy in operations) if the Decade of Action goals are to be achieved .

4.0 Self-Assessment Exercise(s)

1. The types of drivers that like to exceed the speed limits are called----------
2. ANS: Racing drivers
3. The types of drivers that obey the rules of driving are called----------
4. ANS Law abiding drivers
5. The types of drivers that drive without obey traffic lights are called-------
6. ANS Traffic offenders
7. Which of the following is a physical characteristic of drivers (a) Auditory perception (b) Good visual perception (c) Motion influence (d) Auditory information. ANS B
8. One of the following is a Physiological characteristics of a driver (a) Tactile perception (b) Vestibular perception (c) Motion influence (d) Auditory perception. ANS C

5.0 Conclusion

It is evident that government has been making concerted efforts to improve on road safety in Nigeria by creating various institutions that are responsible for road safety and their functions. You need to know that those efforts have paid off, however much still needed to be done in order to reduce road accidents

6.0 Summary

You have learnt in this unit the institutions charged with the road safety responsibilities and the functions of each. You have also learnt the strategies put in place in order to reduce road accidents rate.

7.0 References/Further Readings

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