



PARTICIPANT HANDBOOK



Automotive

Language:
English

DRIVER CUM MECHANIC



N · S · D · C
National
Skill Development
Corporation



DRIVER CUM MECHANIC



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Welcome Note

Dear Participant,

Welcome to the "Driver cum Mechanic" training programme. On completion of this programme, it is expected that you will join the automobile industry as a LMV Driver, Commercial Vehicle Driver, Taxi Driver or Driving Assistant. As a driving assistant or mechanic, you would be able to lubricate the parts of the vehicle, locate the defects and attend the minor maintenance of the different types of light motor vehicles.

Read each module, log your key learnings and attempt the worksheet questions in the end.

General Instructions to Trainee:

1. Greet your instructor and the other participants when you enter the class.
2. Always be punctual for every class.
3. Be regular. Candidates who fall short of the required attendance will not be certified.
4. Inform your instructor if, for any reason, you need to miss class.
5. Pay attention to what your instructor is saying or showing.
6. If you do not understand something, put up your hand and seek clarification.
7. Make sure you do all the exercises at the end of each module in this book. It will help you understand the concepts better.
8. Practice any new skills you have learnt as many times as possible. Seek the help of your Trainer or co-participant for practice.
9. Take all necessary precautions, as instructed by your Trainer, while working with electricity and with tools.
10. Make sure you are neatly attired and presentable at all times.
11. Participate actively in all the activities, discussions and games during training.
12. Always take bath, wear clean clothes and comb your hair before you come to class.
13. The three most important words you must always remember and use in your daily conversation are PLEASE, THANK YOU and SORRY.

Chalti का NAAM GAADI



There lived 3 brothers – Brijmohan, Manmohan, and Jagmohan. All of them were drivers to three rich families. Their lives were going on smooth. They were happy with their income.

One day Brijmohan and Manmohan went to work and Jagmohan stayed back as it was his weekly-off. Unfortunately, the car Brijmohan was driving broke down midway. He was scared and confused. He had to reach the airport to pick up his boss and was getting late. Knowing his boss, he was sure that he would lose his job now. It was very early in the morning and there was no garage nearby. He called Jagmohan:

Jagmohan: Yes brother! What's the matter?

Brijmohan: Jaggu, my car broke down mid-way. I have no idea what happened to it?

Jagmohan: Oh ok! But how can I help you? I have no idea in that field.

Brijmohan: Oh God!

(Disconnects the call)

Brijmohan then calls Manmohan hesitantly.

Manmohan: Yes Brij?

Brijmohan: Mannu, my car is not working; I don't know what to do.

Manmohan: Where are you right now?

Brijmohan: Near M.G. Road. Come soon.

Manmohan: I will reach in 5 mins.



After 15 mins



Manmohan: Brij, now start the car, it is working. There was a minor problem with the car battery, now everything is fine.

Brijmohan: (Holding Manmohan's hand) Thank you so much Mannu.

Manmohan: This is why I always ask you to learn mechanism of a car. It is better to be a **Driver cum Mechanic** than just a Driver.

Brijmohan nods and then starts the car with a big smile.



Introduction

From the above story we came to know that one who knows driving must also have knowledge about a car's mechanism. This would give him the confidence to drive a car.

Driving safely through the chaotic Indian roads requires more precautions than one can imagine. When you get your car on the streets, the first thing you see is how cars and other vehicles attempt to overtake each other from different sides. Hence, safety becomes the first priority when you get behind the wheels of a car.

What is therefore essential is an effective training programme that would let one drive light motor vehicles like cars with absolute safety. Driving in traffic is more than just knowing how to operate the mechanisms that control the vehicle; it requires knowing how to apply the rules of the road, which ensures safe and efficient driving.

An educated driver will always have an intuitive understanding of the basics of vehicle handling that would keep him/her not only safe and alert but also quite confident while driving on the roads. One will also know everything about driving heavy as well as light motor vehicles on different kinds of roads and surfaces keeping in mind the traffic rules.

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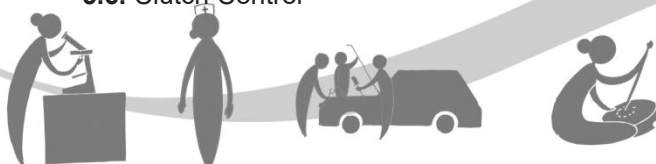
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DRIVING LAWS & RULES, KNOWLEDGE AND UNDERSTANDING OF VEHICLE OPERATION

LEARNING OUTCOMES: 

- Knowing about driving laws
- Knowing about the policies for driving license
- Learning about traffic communication, signals and codes

PRE-SESSION ACTIVITY

- The Trainer will show a video session to the Trainees on different parts of a car.

1.1 The Motor Vehicle Act, 1988

- The Motor Vehicles Act combines the law relating to Motor Vehicles i.e. the law relating to the Constitution, use and control of motor vehicles.
- The first enactment relating to motor vehicles in India was the Indian Motor Vehicles Act 1914, which was consequently replaced by Motor Vehicles Act, 1939.
- The Act of 1939 had been modified several times.
- Despite several amendments or modifications, it was necessary to bring out a comprehensive legislation or regulation.

1.2 Some common terms related to driving and vehicles:

➤ **Definition "Motor Vehicle"**

- "Motor Vehicle" means any mechanically driven vehicle.
- It is adapted to use on roads where the power of propulsion is transmitted from an external or internal source.
- It also includes a chassis to which a body is not attached.
- Motor vehicles are usually made for commercial purposes on the highways for transportation of passengers and several other things.



➤ **" Articulated Vehicle "**

It means a Motor Vehicle with a semi-trailer attached.



➤ **"Axle Weight"**

- Axle weight is the maximum distributed weight that may be supported by an axle of a road vehicle.
- Typically, Axle weight is followed by either the letters FR or RR that indicate rear or front axles respectively.

➤ **"Certificate of registration"**

The certificate issued by a competent authority to the effect that a motor vehicle has been duly registered in accordance with the provisions of the Act.

➤ **"Conductor"**

- Conductor is always engaged
 1. In collecting fares from passengers,
 2. In regulating their entrance or exit,
 3. In the stage carriage, and
 4. In performing similar other functions as may be prescribed.



➤ **"Contract Carriage"**

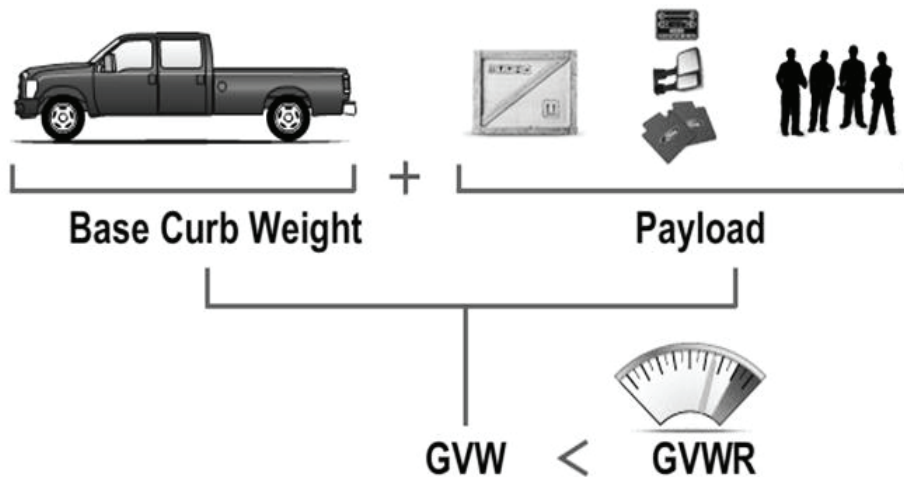
- A contract carriage refers to a contract created between a carrier of goods and passengers.
- Usually, it defines the duties, rights and liabilities of parties to the contract with the intention to address topics.

➤ **"Goods carriage"**

Any motor vehicle constructed or adapted to use solely for the carriage of goods.

➤ **"Gross Vehicle weight(GVW)"**

- Gross Vehicle Weight means the maximum operating weight of a vehicle.
- The maximum operating weight includes the vehicle's chassis, body, engine, engine fluids, fuel, accessories, driver, passengers and cargo but excluding that of any trailers.



➤ **"Learner's license"**

It is issued by the competent authority under chapter II to authorise the person for driving a motor vehicle of any specified class or description, as a learner.



➤ **"Heavy goods vehicle"**

Whether it is a tractor or a road-roller, the unladen weight of any goods carriage exceeding 12,000 kilograms will be called a heavy goods vehicle.



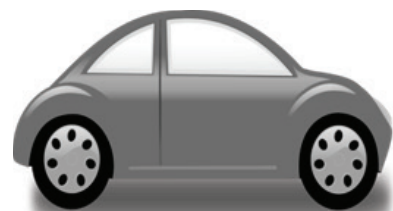
➤ **"Medium Goods Vehicle"**

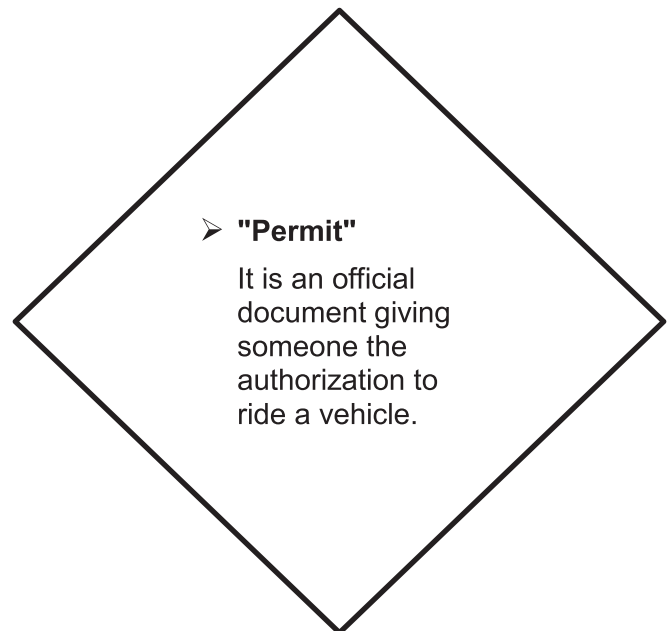
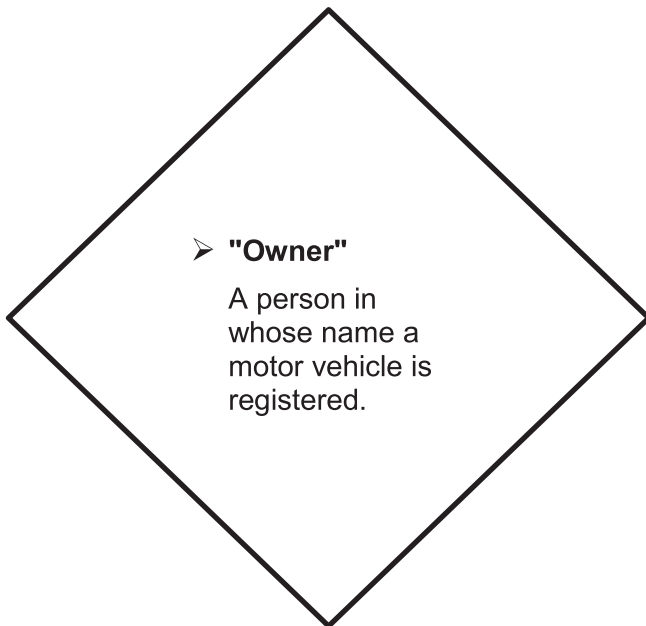
Any goods carriage other than a light motor vehicle or a heavy motor vehicle is a medium goods vehicle.



➤ **"Light Motor Vehicle"**

If any lightweight vehicle like a car or a van has an unladen weight not exceeding 7,500 kilograms, it will fall under the category of light motor vehicles.





"Registering Authority"

An authority empowered to register motor vehicles under Chapter IV of the Act.

"Route"

A line of travel, which specifies the highway that may be navigated by a motor vehicle between one terminus and the other.

"Semi-trailer"

- A vehicle is not mechanically propelled (other than a trailer).
- It is intended to be connected to a motor vehicle.
- It is constructed in such a manner that a portion of it is super-imposed on, and a part of whose weight is borne by.

"Stage Carriage"- "Stage Carriage" means a motor vehicle constructed or adapted to carry more than six passengers excluding the driver.

"Trailer"- Any vehicle, other than a semi-trailer and a side-car, drawn or intended to be drawn by a motor vehicle.

"Unladen weight"- The unladen weight of any vehicle indicates the weight when it is not carrying goods, passengers or other items. It excludes the weight of the fuel or batteries in case of electric.

"Weight"- The total weight borne by the wheels of a vehicle on to the surface where the vehicle rests.



Test yourself



A. Fill in the blanks:

1. The competent authority under chapter II to authorise the person specified for driving a motor vehicle issues the _____ license.
2. _____ is the maximum distributed weight that may be supported by an axle of a road vehicle.
3. A _____ refers to a contract created between a carrier of goods or passengers.

B. Tick the correct option:

1. "Motor Vehicle" means any mechanically/technically driven vehicle. []
2. An authority empowered to register motor vehicles under Chapter IV/VII of the Act. []
3. Any vehicle, other than a semi-trailer and a side-car, drawn or intended to be drawn by a motor vehicle - "Trailer/ Stage Carrier". []

1.3 Licensing Of Drivers

INDIAN UNION DRIVING LICENCE Govt. of Uttarakhand		Licence No : UK-TEST0000000	
 Image of Licence Holder	DL No: UK-TEST0000000 Name : NAME OF LICENCE HOLDER S/o : FATHER'S NAME OF LICENCE HOLDER Address : ADDRESS OF LICENCE HOLDER	Non-Transport Validity From : DD/MM/YYYY To : DD/MM/YYYY	Transport Validity (if applicable) From : DD/MM/YYYY To : DD/MM/YYYY
		Date of 1st Issue of Driving Licence DD/MM/YYYY	Dates on which additional vehicles were included (if applicable)
 Signature of Holder	Date of Birth : DD/MM/YYYY is licenced to drive throughtout India vehicle of the following descriptions : Class of Vehicles	Class of Vehicles	Class of Such Vehicles (if applicable)
		Name/Desg. of Testing Authority	Name/Desg. of Testing Authority
Sign. of The Licencing Authority		Badge No.	Issue Dt.
			Blood Group

1. Why do you need a Driving License?

- As per the Motor Vehicle Act 1988, a valid Driving License is necessary to drive any motor vehicle on public roads. A driving license is necessary for every person who drives a motor vehicle at any public place.

2. Why do you need a Driving License?

- You will get your driving license at the Regional Transport Office or Motor Vehicles Inspector's Office, having jurisdiction over your residential area.

3. When do you get it?

- After completion of 16 years of age, one can ride motorcycles with an engine capacity not exceeding 50cc with the consent of the parent / guardian.
- After completion of 18 years of age, one can ride light motor vehicles as well as motorcycles with an engine capacity exceeding 50cc.
- After completion of 20 years of age, one is authorised to drive transport vehicles.

4. How do you obtain a Learner's License?

Applicants for a Learner's License should appear personally before the Licensing Authority with the following:

- Application in prescribed Form
- Fees
- Proof of age, appropriate for the relevant class of vehicle. For example Birth Certificate, Secondary School Certificate, Life Insurance Policy, Passport etc.
- Proof of residence like Ration Card, Electoral Roll, Electricity / Telephone Bill etc., showing the name of the person
- Medical Certificate wherever applicable
- 3 recent passport size photographs of the applicant
- Applicants for Transport Vehicle License must apply in prescribed Form and produce a Permanent Driving License for Light Motor Vehicle held by him, at least for one year
- Applicants for Learner's License shall pass a test regarding basic traffic signs and driver's responsibilities
- The Learner's License so issued is valid for a period of six months from the date of issue and is renewable for another period of six months, during its validity

5. How do you obtain a Permanent License?

The applicant should appear in person along with a registered motor vehicle of the relevant category before the Licensing Authority with the following:

- Application in prescribed Form (available with the department)
- Fee for test and License
- Valid Learner's License held by the applicant for the relevant class, which is older than 30 days
- 4 recent passport size photographs of the applicant

Applicants for Transport Vehicle License should attach the Training Certificate issued by a recognized driving school.

The applicant shall pass a driving test on the type of vehicle for which he has applied

6. How long is the Driving License valid?

- License to drive a Non-Transport Vehicle is valid for 20 years from the date of issue or until the holder attains the age of 50 years, whichever is earlier.
- Thereafter, the License is renewed every 5 years.
- Transport Vehicle License is valid for a period of 3 years from the date of issue or renewal.

7. What is the extent of effectiveness of licenses to drive motor vehicle?

- Any license whether learner's license or permanent license issued for a fixed duration by any competent authority under this act shall be effective throughout India.

8. What is the procedure of renewal of driving licenses?

- Any licensing authority may, on application made to it, renew a driving license issued under the provisions of this act with effect from the date of its expiry.

9. What are the powers of a Licensing Authority to disqualify from holding a driving license?

Licensing Authorities have powers to disqualify any person from holding a driving license if it finds that the driving license holder is a habitual criminal, drunkard or a habitual addict under Narcotic Drugs and Psychotropic Substances Act, 1985. The authorities also have the power to ensure whether:

- He/she is using or has used a motor vehicle in the commission of a cognizable offence.
- His/her previous conduct as driver of a motor vehicle is showing that his driving is likely to be unsafe in public.
- He/she has obtained any driving license or a license to drive a particular class or description of motor vehicles by fraud or misinterpretation.
- He/she has committed any such act which is likely to cause nuisance or danger to public.
- He/she has failed to submit or has not passed the test referred to in provisions.

10. What is the procedure of maintenance of state registers of driving licenses?

Each State Government has the power to maintain the full particulars as what may be prescribed by the Central Government in regard to issuing driving licenses.

The following details would be included in a form:

- Name
- Address
- License number
- Date of issue or renewal of licenses
- Expiry of licenses
- Class and type of vehicle authorized to drive and other particulars

1.4 Driving License in India

The minimum age for driving in India is 16 years for motorcycles of 50cc or less, and 18 years for all the other vehicles.

Remember these points:

- The Motor Vehicle Act 1988 states that a valid Driving Licence is essential to drive any motor vehicle on public roads.
- The driving license is issued by the Regional Transport Office (RTO) after the recipient has succeeded in a driving test and also has proved the required age.
- The Driving License in India is categorised as Motorcycle License, Light Motor Vehicle (LMV) license, and Heavy Motor Vehicle (HMV) License.
- Learner's License is issued after the recipient has passed a theory test.
- The legislation of Driving License is done through the 'Rules of the Road Regulation' and the Motor Vehicle Act 1988.
- It is mandatory for the driver to keep the original copy of the driving license.

Types of Driving Licenses in India:

There are different licenses allotted for different purposes:

1. Learner Driving License

A Learner Driving License is a temporary license that is valid up to 6 months from the date of issue.

2. Permanent Driving License

Permanent driving license is for those who are eligible for driving after thirty days (to apply within 180 days) from the date of issue of the learner license. This license includes the vehicle systems, driving, traffic rules & regulations.

3. Duplicate Driving License

Duplicate License is issued when it is about loss, theft or on mutilation. The procedure to apply for it is to lodge a FIR of the lost license, challan clearance report from RTO (in case of Commercial licence renewal) and an application in Form LLD.

The authority from the records will verify the particulars. If the license is lost and expired by more than 6 months, it will require permission from Head Quarter of Transport Department.

**Things to Remember**

Keep a photocopy of the original license or particulars related to it to make it easier for the issuing authority to locate the particulars from their record.

1. International Driving License

International Driving License is valid for one year for that person who is visiting the country. Apart from address proof and birth certificate, one has to make/have a valid passport and valid visa.

2. Motorcycle License or Two-wheeler License

The Regional Transport Authority (RTO) permits driving of only two-wheeler vehicles like bike, scooter and moped.

3. Light Motor Vehicle License (LMV)

While driving vehicles like auto rickshaws, motor cars, jeeps, taxis, three-wheelers, delivery vans etc., a person must own a Light Motor Vehicle License.

4. Heavy Motor Vehicle License (HMV)

To drive heavy motor vehicles like trucks, buses, tourist coaches, cranes, goods carriages etc., a person must own a Heavy Motor Vehicle License (HMVL).

**While Drive
#Lesson-1#**



**DO NOT
DRINK
AND
DRIVE**



Test yourself

A. Match the following:

- | | |
|----------------------------------|--|
| a) Temporary License | 1. is valid for 1 year |
| b) Permanent License | 2. is for those who are eligible for driving after 30 days |
| c) International Driving License | 3. is valid up to 6 months |

B. Tick the correct option:

- 1 After completion of 14/16 years of age, a driver is allowed to driving motorcycles. []
- 2 The License is renewed every 5/7 years. []

C. Write the full forms:

1. RTO-
2. HMV-
3. LMV-

1.5 Licensing of Conductors

1. What is the necessity of conductor's licenses?

For acting as a conductor of a stage carriage, one should have an effective conductor's license issued by a competent authority.

Also, no person shall employ or permit any person who is not licensed to act as a conductor for a period not exceeding one month.

2. What are the conditions for cancellation of conductor's license?

Any licensing authority may at any time cancel a conductor's license. The authority has reasonable grounds to believe that:

- the holder of the license is suffering from any disease or disability which is likely to render him permanently unfit to hold such license
- The authority cancelling a conductor's license is not the authority which issued the same, and also, it shall state the reason of cancellation to the authority which issued the license.

1.6 Registration of Motor Vehicles

1. What do you mean by Certificate of Registration?

Certificate of Registration is the certificate issued by a competent authority to the effect that a motor vehicle has been duly registered in accordance with the provisions of this Act.

2. What is the necessity for Registration?

No person shall drive any Motor Vehicle and no owner of any Motor Vehicle shall cause or permit the vehicle to be driven in any public place or any other place, unless the vehicle is registered in accordance with Chapter 4 of IMV Act 1988.

3. Where the Registration process is to be conducted?

Every Motor Vehicle owner shall get his/her vehicle registered by a Registering Authority in whose Jurisdiction he/she has residence or place of business where the vehicle usually rests.

4. What is the procedure for Registration?

For registration of a motor vehicle, the owner has to:

- Apply through an application
- Produce documents, particulars and information, which shall be made within such period as prescribed by the Central Government.
- Pay fees as may be prescribed by the Central Govt.

The registering authority shall issue a "Certificate of Registration" to the owner of the motor vehicle. The document will contain all such particulars and information as may be prescribed by the Central Government.

The registering authority shall also enter the particulars of the certificate in a register, which is to be maintained by him.