



CBSE Class X Automotive (QP Code 91)



Time Allowed :2 Hours	Maximum Marks :50	Total Questions :21
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General Instructions

Please read the instructions carefully.

1. This question paper consists of 21 questions in two Sections : Section A and Section B.
2. Section A has Objective type questions, whereas Section B contains Subjective type questions.
3. Out of the given $(5 + 16) = 21$ questions, a candidate has to answer $(5 + 10) = 15$ questions in the allotted (maximum) time of 2 hours.
4. All questions of a particular section must be attempted in the correct order. .
5. Section A : Objective Type Questions (24 marks) :
 - (a) This section has 5 questions.
 - (b) There is no negative marking.
 - (c) Do as per the instructions given.
 - (d) Marks allotted are mentioned against each question/part
6. Section B : Subjective Type Questions (26 marks) :
 - (a) This section has 16 questions.
 - (b) A candidate has to do 10 questions.
 - (c) Do as per the instructions given.
 - (d) Marks allotted are mentioned against each question/part.

Section - A

1. Answer any 4 out of the given 6 questions on Employability skills.

- (i) Unmanaged stress leads to anxiety and sorrow resulting in ill status of ____.
- (A) mental and physical health
 - (B) physical health
 - (C) understanding
 - (D) working ability

Correct Answer: (A) mental and physical health.

Solution: Unmanaged stress can have a significant impact on both mental and physical health. Chronic stress can lead to anxiety, depression, and various physical health issues, such as cardiovascular problems, weakened immunity, and digestive issues. Thus, unmanaged stress affects both mental and physical well-being, making option (A) the correct answer.

💡 Quick Tip

Managing stress is crucial for maintaining both mental and physical health, as chronic stress can lead to severe health issues.

(ii) A paragraph is a series of sentences, that are organized and coherent, and are all related to ____.

- (A) adverb
- (B) noun
- (C) single topic
- (D) multiple topics

Correct Answer: (C) single topic.

Solution: A paragraph typically consists of sentences that are logically related to a single topic. The topic sentence introduces the main idea, and the following sentences provide supporting details or explanations. Hence, the correct answer is "single topic."

💡 Quick Tip

A well-structured paragraph should focus on a single main idea or topic.

(iii) ___ guides independent individuals, as it helps them consider long-term consequences rather than just transient feelings.

- (A) Self-awareness
- (B) Self-motivation
- (C) Self-creativity
- (D) Self-regulation

Correct Answer: (A) Self-awareness.

Solution: Self-awareness refers to the ability to recognize one's own emotions, thoughts, and behaviors, and how they influence others. This helps individuals make better decisions by considering the long-term consequences of their actions, rather than being driven by short-term feelings or impulses. Hence, the correct answer is "Self-awareness."

💡 Quick Tip

Self-awareness is essential for making informed decisions and understanding the consequences of one's actions.

(iv) __ is process of changing the appearance of the text in a document through the use of various fonts, font colours, font sizes etc.



Correct Answer: Formatting.

Solution: Formatting involves adjusting the appearance of text to make it more readable or visually appealing. This includes changing fonts, sizes, colors, and other elements to suit the document's purpose. Hence, the correct answer is "Formatting."

💡 Quick Tip

Formatting helps in making text visually appealing and enhances readability in documents.

(v) Entrepreneurs use the material and people available around them, to make the products -----.

- (A) at higher cost
- (B) at low cost
- (C) attractive
- (D) a high quality

Correct Answer: (B) at low cost.

Solution: Entrepreneurs often focus on minimizing production costs to maximize profits. By utilizing available resources efficiently and producing products at a lower cost, they can maintain a competitive edge. Hence, the correct answer is "at low cost."

💡 Quick Tip

Reducing production costs is essential for entrepreneurs to stay competitive and maximize profitability.

(vi) The non-living thing of the environment, lithosphere, refers to the -----.

- (A) Water bodies
- (B) Ocean
- (C) Outer layer of earth
- (D) Seas

Correct Answer: (C) Outer layer of earth.

Solution: The lithosphere is the outermost layer of the Earth, consisting of the crust and the upper mantle. It includes the landmasses and the ocean floors. Hence, the correct answer is "Outer layer of earth."



💡 Quick Tip

The lithosphere refers to the solid outer layer of the Earth that includes both land and ocean floors.

2. Answer any 5 out of the given 6 questions.

(i) __ minimizes the impact of a particular road condition, providing a safe drive to the occupants of the vehicle.

- (A) Transmission system
- (B) Steering system
- (C) Braking system
- (D) Suspension system

Correct Answer: (D) Suspension system.

Solution: The suspension system in a vehicle is responsible for minimizing the impact of road conditions, such as bumps and uneven surfaces, ensuring a smoother ride. It absorbs shocks and vibrations, providing safety and comfort to the occupants. Hence, the correct answer is "Suspension system."

💡 Quick Tip

The suspension system plays a crucial role in vehicle stability and passenger comfort.

(ii) 4 x 4 drive chassis vehicle consists of 4 wheels and _____ is/are the driving wheels.

- (A) one of them
- (B) three of them
- (C) all of them
- (D) none of them

Correct Answer: (C) all of them.

Solution: A 4x4 drive chassis vehicle is equipped with a drivetrain that powers all four wheels. This ensures better traction and stability on various terrains, as all four wheels receive power to move the vehicle. Hence, the correct answer is "all of them."

💡 Quick Tip

In a 4x4 vehicle, all four wheels are driven for improved performance on rough and uneven surfaces.



(iii) Which manual is provided with every new vehicle?

Correct Answer: Owner's manual.

Solution: The owner's manual is typically provided with new vehicles. It contains important information about the vehicle's operation, maintenance, and safety features. This is the manual that the owner refers to for understanding the vehicle's specifications and guidelines. Hence, the correct answer is "Owner's manual."

💡 Quick Tip

Always read the owner's manual for important vehicle operation and maintenance details.

(iv) The rotary motion of the transmission main shaft is carried out through the ----- to the differential casing, the rear wheels to rotate.

- (A) flywheel
- (B) propeller shaft
- (C) auxiliary shaft
- (D) counter shaft

Correct Answer: (B) Propeller shaft.

Solution: The propeller shaft transfers the rotary motion of the main transmission shaft to the differential casing. This motion is then passed to the rear wheels, enabling the vehicle to move. Hence, the correct answer is "propeller shaft."

💡 Quick Tip

The propeller shaft is critical for transmitting motion from the transmission to the differential.

(v) Function of lubricate is to reduce ----- and wear.

- (A) friction
- (B) power
- (C) efficiency
- (D) load

Correct Answer: (A) Friction.

Solution: Lubrication is used to reduce friction between moving parts. By minimizing friction, lubrication helps reduce wear and tear on components, increasing their lifespan and ensuring smooth operation. Hence, the correct answer is "friction."



💡 Quick Tip

Lubricants reduce friction, helping parts move more smoothly and reducing wear and tear.

(vi) A steering gear transforms rotary motion of the steering wheel into the reciprocating motion of the -----.

- (A) drag link
- (B) drop arm
- (C) pull and push rod
- (D) cross shaft

Correct Answer: (A) Drag link.

Solution: A steering gear system converts the rotary motion of the steering wheel into the linear (reciprocating) motion necessary to turn the wheels. The "drag link" is an essential component of the steering mechanism, transferring the rotary movement from the steering box to the steering arm, which helps in turning the wheels. Hence, the correct answer is "drag link."

💡 Quick Tip

The drag link is used in steering mechanisms to transmit motion, converting rotary to linear movement.

3. Answer any 5 out of the given 6 questions.

(i) Name the tools used to tighten and loosen nuts and bolts.

Correct Answer: Wrench.

Solution: A wrench is a tool designed to tighten or loosen nuts and bolts. It works by applying torque to the fastener, allowing for easier adjustment or removal. Hence, the correct answer is "Wrench."

💡 Quick Tip

A wrench is the primary tool used to tighten or loosen nuts and bolts.

(ii) A hand tool used to cut, shear and chip the metal is called -----.

- (A) Plier
- (B) Hand hacksaw
- (C) File



(D) Chisel

Correct Answer: (B) Hand hacksaw.

Solution: A hand hacksaw is used for cutting metal, plastic, and other materials. It has a fine-toothed blade and is commonly used for precise cutting tasks. Hence, the correct answer is "Hand hacksaw."

💡 Quick Tip

A hacksaw is ideal for cutting metals and other hard materials with precision.

(iii) A hydrometer is usually made of glass and consists of cylindrical stem and a -----.

- (A) bulb weighted
- (B) float
- (C) valve
- (D) weightless bulb

Correct Answer: (B) Float.

Solution: A hydrometer is a device used to measure the specific gravity of liquids. It consists of a cylindrical stem with a float at one end that allows it to float in the liquid, indicating its density. Hence, the correct answer is "float."

💡 Quick Tip

A hydrometer measures liquid density by floating in the liquid and reading the scale on the stem.

(iv) An instrument used to measure working speed of an engine is called -----.

- (A) Voltmeter
- (B) Multimeter
- (C) Hydrometer
- (D) Tachometer

Correct Answer: (D) Tachometer.

Solution: A tachometer is an instrument used to measure the working speed or rotational speed of an engine, typically in revolutions per minute (RPM). It is commonly used in engines and other mechanical systems to monitor speed and ensure proper performance. Hence, the correct answer is "Tachometer."



💡 Quick Tip

A tachometer measures the RPM (revolutions per minute) of an engine or other rotating machinery.

(v) A machine used to finish work pieces, which must show high surface quality and high accuracy of shape and dimension is called _____ machine.

- (A) Cutting
- (B) Grinding
- (C) Drilling
- (D) Winding

Correct Answer: (B) Grinding.

Solution: Grinding machines are used to finish work pieces with high precision and surface quality. The process involves the use of an abrasive material that is rotated or moved against the workpiece to remove fine layers of material and achieve the desired shape and dimension. Hence, the correct answer is "Grinding."

💡 Quick Tip

Grinding machines are used for high precision finishing of surfaces.

(vi) Testing of an automobile vehicle in advanced weather facilities is needed to gauge its performance under _____ conditions.

- (A) Perfect
- (B) Normal
- (C) Extreme
- (D) Frequent operating

Correct Answer: (C) Extreme.

Solution: Automobile testing in advanced weather facilities is carried out to assess the vehicle's performance under extreme weather conditions, such as high heat, freezing cold, or intense humidity. These tests ensure that the vehicle is able to function properly in diverse and challenging environmental conditions. Hence, the correct answer is "Extreme."

💡 Quick Tip

Testing under extreme weather conditions helps ensure the vehicle's reliability in all environments.

4. Answer any 5 out of the given 6 questions.



(i) In an automatic car washing unit, cleaning as well as _____ takes place.

- (A) Foam washing
- (B) Testing
- (C) Dry washing
- (D) Shampoo washing

Correct Answer: (A) Foam washing.

Solution: In an automatic car washing unit, foam washing is commonly used to clean the vehicle. Foam is applied to the surface of the car to lift dirt and debris before rinsing and drying. This process ensures a thorough cleaning with minimal physical contact. Hence, the correct answer is "Foam washing."

💡 Quick Tip

Foam washing helps to lift and remove dirt from the vehicle surface effectively in an automated washing system.

(ii) Why is air filter is necessary in a car?

Correct Answer: To ensure proper air supply.

Solution: The air filter in a car ensures that clean air is supplied to the engine for proper combustion. It prevents dirt and debris from entering the engine, which can affect performance and longevity. Hence, the correct answer is "To ensure proper air supply."

💡 Quick Tip

The air filter is crucial for maintaining engine efficiency by preventing harmful particles from entering the engine.

(iii) While it is a general rule to change vehicle's coolant every two years, some manufacturers differ on the basis of the _____ they use.

- (A) Radiator
- (B) Coolant
- (C) Water pump
- (D) Engine oil

Correct Answer: (B) Coolant.

Solution: Manufacturers may recommend different intervals for changing the coolant based on the type of coolant used. Some coolants may last longer or require less frequent changes, depending on their chemical composition. Hence, the correct answer is "Coolant."



💡 Quick Tip

Coolants come in various types, and the recommended change interval can vary depending on the type used in the vehicle.

(iv) Typically, what is the useful life of consumer electronics?

Correct Answer: 3-5 years.

Solution: The useful life of consumer electronics typically ranges between 3 to 5 years. After this period, they may experience a decrease in performance, or newer models may replace them. Hence, the correct answer is "3-5 years."

💡 Quick Tip

The lifespan of consumer electronics is generally between 3 to 5 years before performance starts to degrade or they are replaced by newer models.

(v) If the mileage of the car is between 4000 kms and 15000 kms, you will need to -----.

- (A) Top up the engine oil
- (B) Change the oil filter
- (C) Change the engine oil
- (D) Clean the oil filter

Correct Answer: (C) Change the engine oil.

Solution: When the car has run between 4000 and 15000 kilometers, it is recommended to change the engine oil to ensure optimal engine performance. Regular oil changes help to keep the engine running smoothly and prevent damage. Hence, the correct answer is "Change the engine oil."

💡 Quick Tip

Changing the engine oil regularly helps extend the engine's lifespan and improves fuel efficiency.

(vi) In changing the fuel filter, some vehicles required the use of _____ to disconnect fuel fittings, including the fittings connecting the fuel filter.

- (A) Ring spanner
- (B) Spanners
- (C) Special tools
- (D) Plier



Correct Answer: (C) Special tools.

Solution: In some vehicles, special tools are needed to disconnect the fuel fittings when replacing the fuel filter. These tools ensure that the process is done safely and efficiently without damaging any parts. Hence, the correct answer is "Special tools."

💡 Quick Tip

Using the right special tools ensures proper handling of fuel fittings and prevents any accidental leaks or damage.

5. Answer any 5 out of the given 6 questions.

(i) Two of the most important aspects of positive body language are

- (A) Communication and Eye contact
- (B) Smiling and Cheering
- (C) Explanation and Smiling
- (D) Smiling and Eye contact

Correct Answer: (D) Smiling and Eye contact.

Solution: Smiling and making eye contact are key aspects of positive body language, as they convey confidence and openness. These non-verbal cues play a crucial role in effective communication. Hence, the correct answer is "Smiling and Eye contact."

💡 Quick Tip

Smiling and eye contact help build rapport and trust in both personal and professional settings.

(ii) Automobile sales person is expected to perform a set of duties, from the given below:

- (A) Explains fully the performance of product, application and benefits
- (B) Ensure good maintenance
- (C) Issues driving license
- (D) Arranges tours and guides

Correct Answer: (A) Explains fully the performance of product, application and benefits.

Solution: An automobile sales person must be able to clearly explain the product's performance, its application, and the benefits it offers. This helps customers make an informed decision when purchasing a vehicle. Hence, the correct answer is "Explains fully the performance of product, application and benefits."



💡 Quick Tip

Salespersons should always focus on explaining the key benefits of the product to customers.

(iii) State the reason, why manufacturers of automobile traditionally rank at the top of the RD funding lists of all industries.

Correct Answer: To innovate and improve efficiency.

Solution: Automobile manufacturers invest heavily in research and development (RD) to innovate and improve the efficiency of their vehicles. This includes advancements in fuel efficiency, safety, and overall performance. Hence, the correct answer is "To innovate and improve efficiency."

💡 Quick Tip

RD in the automobile industry drives innovation in safety, performance, and environmental standards.

(iv) The cars using combination of electrical and petrol energy are called _____ cars.

- (A) High speed
- (B) Elect-petro
- (C) Hybrid
- (D) Green

Correct Answer: (C) Hybrid.

Solution: Hybrid cars combine the advantages of both electric and petrol engines. They are more fuel-efficient and environmentally friendly, as they produce fewer emissions compared to conventional petrol-only vehicles. Hence, the correct answer is "Hybrid."

💡 Quick Tip

Hybrid cars use both an electric motor and a petrol engine, providing better fuel efficiency and reducing carbon emissions.

(v) Researches, testing in advance weather facilities, test the vehicle performance in special facilities built to mimic _____.

- (A) Overheating
- (B) Monsoon and wind storm
- (C) Inclement weather



(D) Temperature and pressure

Correct Answer: (C) Inclement weather.

Solution: In advanced weather testing facilities, vehicles are tested under simulated inclement weather conditions such as heavy rain, snow, or extreme temperatures. This testing ensures that the vehicles perform well in a variety of challenging environmental conditions. Hence, the correct answer is "Inclement weather."

💡 Quick Tip

Testing vehicles in inclement weather conditions helps manufacturers ensure reliability and safety in all environments.

(vi) One of the most important aspects of customer service is that of what is often referred to as the _____.

- (A) Provision of pre-sale service
- (B) Good servicing
- (C) Feel good factor
- (D) Proper maintenance

Correct Answer: (C) Feel good factor.

Solution: Customer service often emphasizes the "feel good factor," which refers to creating a positive, memorable experience for customers. This can lead to repeat business and customer loyalty. Hence, the correct answer is "Feel good factor."

💡 Quick Tip

A positive customer experience, or "feel good factor," plays a critical role in retaining customers and building brand loyalty.

Section - B

Answer any 3 out of the given 5 questions on Employability Skills. Answer each question in 20 30 words each.

6. What do you understand by declaratory sentence?

Solution: A declaratory sentence is a statement that provides information or expresses an assertion. It simply states a fact or opinion and ends with a period. The purpose of a declaratory sentence is to convey information in a direct and clear manner. For example, "The sun rises in the east" is a declaratory sentence because it makes a factual statement about the sun's



movement.

💡 Quick Tip

Declaratory sentences are used to convey facts or opinions directly and end with a period.

7. How does 'Yoga' help in stress management?

Solution: Yoga helps in stress management by promoting physical relaxation and mental clarity. It encourages mindfulness through meditation and deep breathing techniques, which activate the parasympathetic nervous system, helping to reduce stress. The physical postures of yoga improve flexibility and muscle relaxation, which in turn reduces physical tension and the mental effects of stress. Regular practice also enhances emotional balance, making it an effective tool for managing daily stress.

💡 Quick Tip

Yoga combines physical postures, breathing techniques, and meditation to help manage stress effectively.

8. Give an excellent example of ecosystem. Justify it practically.

Solution: A well-known example of an ecosystem is a coral reef. Coral reefs support a wide variety of marine life, from fish to mollusks and algae, each of which plays a role in the overall health of the reef. Practically, coral reefs provide numerous benefits to humans, including acting as barriers to coastal erosion, supporting local fisheries, and boosting tourism. They also play a key role in maintaining the balance of marine ecosystems by providing food and habitat to diverse species.

💡 Quick Tip

Coral reefs are an excellent example of ecosystems, providing benefits such as protection, food, and biodiversity.

9. What do you understand by multi-user operating system of computer?

Solution: A multi-user operating system is one that allows multiple users to access a computer's resources simultaneously. Each user has an independent environment where they can run their programs and access files without interfering with others. The operating system manages the sharing of resources, ensuring that each user gets a fair amount of system power, like CPU time and memory. Examples include UNIX, Linux, and Windows Server.



💡 Quick Tip

Multi-user operating systems allow multiple users to access and use system resources simultaneously, ensuring fair resource distribution.

10. Write any three qualities of successful entrepreneur.

Solution: 1. Innovation: Successful entrepreneurs are constantly seeking new ideas or approaches to solve problems. They are not afraid to think outside the box and innovate.
2. Resilience: Entrepreneurs face many challenges, and their ability to bounce back from failure and keep moving forward is crucial to their success.
3. Adaptability: The ability to adapt to changing circumstances and make quick decisions is essential for an entrepreneur to stay competitive in a dynamic market.

💡 Quick Tip

Innovation, resilience, and adaptability are key qualities for successful entrepreneurs to navigate challenges and stay competitive.

Answer any 4 out of the given 6 questions in 20 30 words each.

11. Name various types of engine, on the basis of valve arrangement.

Solution: Engines can be classified based on the valve arrangement as follows:

1. Overhead Valve (OHV) Engine: The valves are located above the piston and are operated by push rods.
2. Overhead Cam (OHC) Engine: The camshaft is located above the cylinder head, which controls the valves directly.
3. Single Overhead Cam (SOHC) Engine: A single camshaft controls both the intake and exhaust valves.
4. Double Overhead Cam (DOHC) Engine: Two camshafts are used, one for intake valves and one for exhaust valves.
5. Side Valve Engine: The valves are located beside the piston, typically used in older engines.

💡 Quick Tip

The valve arrangement affects the engine's performance, efficiency, and complexity, with OHV being simpler and DOHC offering better performance.

12. Why service manual is necessary for a service technician?

Solution: A service manual is essential for a service technician as it provides:



1. Detailed Information: The manual provides specific details about the vehicle's components, including part numbers, maintenance schedules, and troubleshooting tips.
2. Guidelines for Repairs and Maintenance: It ensures that technicians follow the manufacturer's prescribed procedures for efficient and accurate repairs.
3. Safety Instructions: It outlines safety precautions that must be followed during service to prevent accidents.
4. Problem Diagnosis: It helps technicians diagnose issues based on symptoms and guides them in identifying the root cause.

 Quick Tip

A service manual is a key tool that enables service technicians to perform repairs correctly, ensuring vehicle safety and reliability.

13. Write the importance of measuring tools in automobile workshop.

Solution: Measuring tools are crucial in an automobile workshop for several reasons:

1. Precision and Accuracy: Measuring tools ensure that parts are fabricated and assembled to exact specifications, which is crucial for vehicle performance and safety.
2. Consistency: They help in maintaining uniformity in repairs and assembly, ensuring that parts fit correctly and function as intended.
3. Quality Control: Measuring tools are used to check the dimensions and quality of parts, ensuring that only components meeting the required standards are used.
4. Time-Saving: By using accurate measuring tools, technicians can quickly identify issues and complete repairs efficiently.

 Quick Tip

Accurate measurements are essential for maintaining the safety, performance, and reliability of vehicles.

14. Write the proper method of disposing the used and old engine oil and filter after changing the engine oil.

Solution: The proper method of disposing used engine oil and filters is as follows:

1. Drain the Oil Properly: Ensure the oil is drained into a sealed container to avoid spills.
2. Dispose of Oil in Designated Recycling Centers: Used engine oil should be taken to recycling centers or disposal facilities equipped to handle hazardous waste.
3. Recycle the Oil Filter: Oil filters should be drained for 24 hours to remove excess oil, then disposed of according to local regulations. They may be recycled if appropriate.
4. Avoid Disposal in Landfills: Never dispose of engine oil or filters in the trash, as they contain harmful contaminants that can pollute the environment.



💡 Quick Tip

Used engine oil and filters must be disposed of responsibly to prevent environmental pollution.

15. How an automobile sales person will ensure the customer, the quality and efficiency of service repairs and maintenance available in dealer's department?

Solution: An automobile sales person can ensure customers of the quality and efficiency of service repairs and maintenance by:

1. Providing Service Documentation: Offering brochures or manuals that outline the services offered, the processes followed, and the certifications of the repair department.
2. Customer Testimonials: Sharing positive reviews or case studies from other satisfied customers to build trust in the services.
3. Quality Assurance: Highlighting warranties or guarantees on repairs and maintenance services, ensuring that customers know the work will be done right.
4. Professionalism and Expertise: Demonstrating the skill and expertise of the service team, as well as the advanced tools and technologies used for repairs.

💡 Quick Tip

A sales person builds customer confidence by providing clear documentation, testimonials, and showcasing the professionalism of the service team.

16. What do you understand by “hybrid drive train” innovation?

Solution: A hybrid drive train is an innovation in vehicle technology that combines two or more sources of power, typically a gasoline engine and an electric motor, to drive a vehicle. This system allows the vehicle to operate more efficiently by using the electric motor at low speeds or during idle times, while the gasoline engine is used for higher speeds and longer distances. The hybrid drive train reduces fuel consumption and emissions, making it a more eco-friendly option compared to traditional vehicles.

💡 Quick Tip

Hybrid drive trains use both electric and gasoline power to improve fuel efficiency and reduce emissions.

Answer any 3 out of the given 5 questions in 50 80 words each.



17. Enumerate the various types of fuel supply system and explain fuel injection system.

Solution: The types of fuel supply systems include:

1. Carburetor System: A traditional system that mixes fuel and air before entering the engine's combustion chamber.
 2. Fuel Injection System: A modern system that directly injects fuel into the combustion chamber or intake manifold under high pressure, ensuring better fuel atomization and combustion efficiency.
- Electronic Fuel Injection (EFI): This system uses electronic sensors and controls to adjust the fuel delivery based on engine needs.
 - Direct Injection: Fuel is injected directly into the combustion chamber, improving efficiency and power.

The fuel injection system is preferred for its precision and ability to optimize fuel efficiency and reduce emissions.

💡 Quick Tip

Fuel injection systems are more efficient and environmentally friendly compared to carburetors due to their precise control over fuel delivery.

18. Write the proper steps of manually cleaning a vehicle.

Solution: The proper steps to manually clean a vehicle include:

1. Rinse the Vehicle: Start by rinsing the entire car with water to remove dirt and debris.
2. Wash the Body: Use a car-specific soap and a microfiber cloth or sponge to wash the body of the car, working from top to bottom.
3. Clean the Wheels: Use a wheel cleaner and a brush to scrub the wheels and tires, removing brake dust and grime.
4. Rinse and Dry: Rinse the car again thoroughly and dry it with a clean microfiber towel to avoid water spots.
5. Clean the Windows: Use a glass cleaner and a soft cloth to clean the windows, mirrors, and lights.
6. Polish and Wax: Apply car wax or polish for added protection and shine.

💡 Quick Tip

A thorough cleaning routine ensures that your vehicle is not only visually appealing but also protected from dirt and environmental damage.

19. Name the various types of measuring tools. Explain Caliper.

Solution: Various types of measuring tools include:



1. Caliper: A precision tool used to measure the internal and external dimensions of an object. It can measure thickness, diameter, or depth with high accuracy.
2. Micrometer: Used for measuring the thickness or diameter of small objects with high precision.
3. Ruler/Tape Measure: Used for general length measurements.
4. Vernier Scale: A tool used to measure small dimensions with more precision than a standard ruler.

A Caliper is used to measure the outside, inside, and depth dimensions of objects. It is particularly useful in mechanical and automotive work, where precision is essential.

💡 Quick Tip

Calipers are crucial for accurate and precise measurements, especially in mechanical and automotive repairs.

20. Write the role of Sales or Marketing representative in Customer Sales Care.

Solution: The role of a Sales or Marketing representative in Customer Sales Care involves:

1. Understanding Customer Needs: Engaging with customers to understand their requirements and preferences in order to offer suitable products or services.
2. Providing Information: Offering clear and accurate product details, benefits, and pricing to help customers make informed purchasing decisions.
3. Handling Objections and Concerns: Addressing customer concerns or objections and providing solutions to ensure customer satisfaction.
4. Post-Sales Support: Offering after-sales service, ensuring customers are satisfied with their purchase and handling any issues that arise after the sale.

💡 Quick Tip

Effective customer sales care focuses on understanding customer needs, offering clear product information, and providing post-sale support.

21. Rohit is shortlisted to work as a technician in an auto workshop. He has been asked to identify top five best new innovations in car safety technology in a latest model of car. He is further asked to explain in brief, the Night Vision Assist. Identify and explain in brief in place of Rohit.

Solution: In the latest car models, some of the top car safety innovations include:

1. Autonomous Emergency Braking (AEB): A system that automatically applies the brakes to avoid a collision if the driver does not react in time.
2. Adaptive Cruise Control: This system automatically adjusts the car's speed to maintain a safe distance from the vehicle ahead.



3. Lane Departure Warning (LDW): This system alerts the driver when the car unintentionally drifts out of its lane.
4. Surround-View Camera System: Provides a bird's-eye view of the car's surroundings, helping the driver park and maneuver in tight spaces.
5. Night Vision Assist: This feature uses infrared sensors to detect pedestrians, animals, or other obstacles in low-light conditions. It displays the thermal images on the dashboard or heads-up display, helping drivers see potential hazards on the road even in the dark.

 Quick Tip

Night Vision Assist enhances driving safety by providing clear visibility of obstacles in low-light conditions, preventing accidents.

