



## CBSE Class X Automotive Set 4 (91)

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

**Read the following instructions very carefully and strictly follow them:**

1. This question paper consists of 21 questions in two sections: Section A & 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 05 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 negatively impact both mental and physical health. Stress can lead to issues such as anxiety, depression, and physical symptoms like headaches, fatigue, or a weakened immune system. It disrupts the balance between emotional well-being and physical functioning, thereby causing overall deterioration in health. Effective stress management techniques, such as mindfulness, relaxation, and physical activity, can help mitigate these effects.

### Quick Tip

Stress management is essential to maintain both mental and physical health. Practice relaxation techniques regularly.

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 focuses on a single topic or idea. It consists of multiple sentences that provide information, details, or arguments related to that one topic, ensuring coherence and unity in writing. Each paragraph begins with a topic sentence, followed by supporting details and a concluding sentence.

#### Quick Tip

A good paragraph revolves around one single topic to maintain clarity and coherence.

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:** (D) Self-regulation

**Solution:** Self-regulation is the ability to control one's emotions, behavior, and thoughts to achieve long-term goals. It helps individuals consider the consequences of their actions, allowing them to act with purpose and focus rather than reacting impulsively. This skill is crucial for personal and professional growth.

#### Quick Tip

Self-regulation ensures actions are aligned with long-term goals instead of transient emotions.

iv. \_\_\_\_\_ is the process of changing the appearance of the text in a document through the use of various fonts, font colors, font sizes, etc.

- (A) Formatting
- (B) Editing
- (C) Designing



(D) Customizing

**Correct Answer:** (A) Formatting

**Solution:** Formatting refers to modifying the appearance of text in a document, including font styles, sizes, colors, alignment, and spacing. Proper formatting enhances the readability and visual appeal of a document, making it more professional and organized.

**Quick Tip**

Formatting improves a document's appearance by adjusting fonts, colors, and layout.

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**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 aim to optimize resources, such as materials and labor, to produce goods or services at the lowest possible cost. This approach enhances competitiveness in the market, making products affordable for consumers while ensuring profitability.

**Quick Tip**

Entrepreneurs focus on minimizing costs to maximize profit and customer satisfaction.

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**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 is a non-living component of the environment and forms the foundation for various ecosystems, supporting life by providing soil, minerals, and other resources.

**Quick Tip**

Lithosphere = Earth's outer crust and upper mantle, vital for ecosystems.

**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 of a vehicle is designed to absorb shocks and minimize the impact of uneven road surfaces. It ensures the comfort and safety of passengers by maintaining tire contact with the road surface and reducing vibrations.

**Quick Tip**

Suspension systems protect passengers from road shocks and improve driving safety.

**ii. 4 × 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:** In a  $4 \times 4$  drive chassis vehicle, all four wheels are driving wheels. This configuration provides better traction and stability, especially on rough or slippery surfaces, making it suitable for off-road and challenging terrains.

**Quick Tip**

A  $4 \times 4$  vehicle uses all four wheels for driving, ideal for off-road conditions.

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**iii. Which manual is provided with every new vehicle?**

**Correct Answer:** Owner's manual

**Solution:** Every new vehicle comes with an owner's manual, which provides essential information about the vehicle, including maintenance guidelines, safety precautions, operating instructions, and troubleshooting tips. This manual helps the owner use the vehicle efficiently and safely.

**Quick Tip**

The owner's manual is a guidebook for understanding and maintaining your vehicle.

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**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 rotary motion from the transmission main shaft to the differential casing. This enables the rotation of the rear wheels, allowing the vehicle to move. It is a crucial component of the drivetrain in vehicles with rear-wheel or four-wheel drive.

**Quick Tip**

The propeller shaft connects the transmission to the differential for wheel rotation.

**v. Function of lubricant is to reduce \_\_\_\_\_ and wear.**

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

**Correct Answer:** (A) friction

**Solution:** Lubricants reduce friction between moving parts in machinery or vehicles, thereby minimizing wear and tear. This extends the lifespan of components, improves efficiency, and reduces the energy required for operation.

**Quick Tip**

Lubricants reduce friction, ensuring smooth operation and durability of machinery.

**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:** (B) drop arm



**Solution:** The steering gear converts the rotary motion of the steering wheel into the reciprocating motion of the drop arm, which ultimately transmits the motion to the steering linkage. This mechanism ensures the vehicle's wheels turn as intended.

**Quick Tip**

The drop arm connects the steering gear to the linkage, enabling wheel 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:** Wrenches and spanners

**Solution:** Wrenches and spanners are tools used for gripping, tightening, or loosening nuts and bolts. They come in various sizes and types to fit different bolt and nut configurations. These tools are essential for assembling or repairing mechanical components.

**Quick Tip**

Use wrenches and spanners for efficient handling of 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:** (D) Chisel

**Solution:** A chisel is a hand tool with a sharp cutting edge, used for cutting, shearing, and chipping metal, wood, or stone. It is commonly used in carpentry and metalworking for precision cutting and shaping.



### Quick Tip

Chisels are essential for precision cutting in metal and woodworking tasks.

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:** (A) bulb weighted

**Solution:** A hydrometer measures the specific gravity of liquids. It consists of a weighted bulb that allows it to float upright in the liquid. The level at which the hydrometer floats indicates the liquid's density or specific gravity.

### Quick Tip

Hydrometers rely on a weighted bulb to measure liquid density or specific gravity.

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 of an engine in terms of revolutions per minute (RPM). It is essential for monitoring engine performance and ensuring it operates within safe limits.



### Quick Tip

A tachometer measures engine speed in RPM, ensuring efficiency and safety.

v. A machine used to finish workpieces, 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:** A grinding machine is used for finishing workpieces to achieve high surface quality and accuracy in dimensions. It removes material from the surface of a workpiece by abrasion, resulting in precise shapes and smooth finishes.

### Quick Tip

Grinding machines ensure precision in shape and surface finish.

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:** Vehicles are tested under extreme conditions such as high or low temperatures, heavy rainfall, or rough terrain to evaluate their durability, safety, and performance. This ensures that the vehicle can perform efficiently in adverse situations.



### Quick Tip

Extreme condition testing ensures vehicles are reliable in harsh 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 automatic car washing units, foam washing is used for efficient cleaning. Foam reduces friction between brushes and the car's surface, ensuring thorough cleaning without causing scratches or damage.

### Quick Tip

Foam washing provides effective and scratch-free cleaning in automatic car washes.

ii. Why is an air filter necessary in a car?

**Answer:** An air filter in a car removes dust, debris, and contaminants from the air before it enters the engine. This ensures clean airflow, improving engine efficiency, performance, and longevity by preventing damage caused by impurities.

### Quick Tip

Air filters protect the engine by providing clean airflow and enhancing performance.

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:** The replacement interval for coolant depends on its type (e.g., organic or inorganic). Some coolants last longer due to advanced formulations that prevent corrosion and maintain optimal engine temperature for extended periods.

**Quick Tip**

Coolant type determines the frequency of replacement, ensuring engine health.

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**iv. Typically, what is the useful life of consumer electronics?**

**Answer:** The useful life of consumer electronics varies depending on the product but generally ranges from 3 to 5 years. Factors such as usage, maintenance, and technological advancements affect their lifespan. Upgrading or replacing is often necessary as older devices become outdated or inefficient.

**Quick Tip**

Consumer electronics generally last 3–5 years, depending on usage and care.

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**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:** Engine oil degrades over time and use, and for optimal engine performance and longevity, it needs to be replaced regularly. Typically, engine oil is changed after covering 4000 to 15000 kms, depending on the type of oil and the manufacturer's recommendation.

#### Quick Tip

Changing engine oil at regular intervals prevents wear and tear and ensures smooth performance.

**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:** Some vehicles require specialized tools to disconnect fuel fittings safely without damaging the filter or connections. These tools are designed to handle specific configurations of fuel lines and fittings.

#### Quick Tip

Special tools ensure safety and precision when handling sensitive fuel filter fittings.

**5. Answer any 5 questions 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:** Positive body language often involves a genuine smile and maintaining eye contact. A smile conveys friendliness and approachability, while eye contact shows confidence and attentiveness, both essential for effective communication.

**Quick Tip**

Positive body language = Smiling + Confident Eye Contact.

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**ii. Automobile salesperson 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 salesperson is responsible for explaining the features, performance, and benefits of a vehicle to potential customers. They address customer queries and ensure the client understands the value of the product before purchase.

**Quick Tip**

Automobile salespersons focus on product knowledge and customer education.

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**iii. State the reason why manufactures of automobile traditionally rank at the top of the R&D funding lists of all industries.**

**Answer:** Automobile manufacturers invest heavily in research and development (R&D) to innovate new technologies, improve safety features, enhance fuel efficiency, and reduce environmental impact. With evolving consumer needs and stricter regulations, continuous R&D ensures that companies remain competitive and meet global standards.



### Quick Tip

R&D in the automobile industry drives innovation in safety, efficiency, and sustainability.

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 use a combination of an internal combustion engine (petrol or diesel) and an electric motor powered by a battery. This dual power source helps reduce fuel consumption and emissions, making hybrid cars more efficient and environmentally friendly compared to traditional cars.

### Quick Tip

Hybrid cars combine petrol/diesel engines with electric motors for better efficiency.

v. Researches, testing in advanced 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:** Vehicle testing in advanced weather facilities simulates inclement weather conditions such as heavy rain, snow, high winds, and extreme temperatures. This helps



manufacturers evaluate the durability, safety, and performance of vehicles under adverse weather conditions.

#### Quick Tip

Inclement weather testing ensures vehicles can handle harsh environmental conditions.

**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:** The "feel good factor" in customer service refers to creating a positive and satisfying experience for customers. This involves addressing customer needs efficiently, providing personalized service, and ensuring customer satisfaction to build trust and loyalty.

#### Quick Tip

Customer satisfaction, or the "feel good factor," is key to building loyalty.

## Section B

**Answer any 3 out of the given 5 questions on Employability Skills.**

**Answer each question in 20–30 words.**

**6. What do you understand by declaratory sentence?**

**Answer:** A declaratory sentence is a statement that provides information, makes a declaration, or expresses an opinion. It ends with a period (full stop) and is used to convey facts or ideas clearly. Examples include:



1. The sun rises in the east.
2. India is a democratic country.

These sentences are essential in communication for providing information and clarity.

#### Quick Tip

Declarative sentences provide information or state facts and always end with a period.

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

**Answer:** Yoga helps in stress management by:

1. Reducing cortisol levels: Yoga lowers the stress hormone cortisol, calming the mind and body.
2. Improving mindfulness: Through meditation and breathing exercises, yoga enhances focus and emotional stability.
3. Relaxing the body: Stretching postures relieve physical tension caused by stress.
4. Improving overall well-being: Regular yoga practice improves sleep, reduces anxiety, and promotes a sense of balance and peace.

These factors make yoga an effective tool for managing stress holistically.

#### Quick Tip

Practice breathing exercises and meditation in yoga to reduce stress effectively.

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

**Answer:** A forest is an excellent example of an ecosystem.

1. Biotic components: Plants, animals, and microorganisms coexist in a balanced environment.
2. Abiotic components: Soil, water, sunlight, and air support life within the forest.
3. Practical justification: Forests provide oxygen, maintain the water cycle, and act as carbon sinks, demonstrating the interdependence of living and non-living elements. This harmony reflects the core of an ecosystem.



### Quick Tip

A forest ecosystem showcases balance between biotic and abiotic factors.

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

**Answer:** A multi-user operating system allows multiple users to access a single system or resources simultaneously. Examples include UNIX and Windows Server.

1. **Functionality:** Supports multiple terminals or connections, enabling resource sharing.
2. **Practical usage:** Widely used in organizations for shared databases, file servers, and applications.
3. **Advantages:** Improves resource utilization and collaboration while reducing operational costs.

### Quick Tip

Multi-user OS is ideal for resource sharing and collaboration in organizational setups.

## 10. Write any three qualities of a successful entrepreneur.

**Answer:**

1. **Innovative mindset:** Entrepreneurs think creatively and develop unique solutions to address market needs.
2. **Risk-taking ability:** They take calculated risks to seize opportunities and grow their ventures.
3. **Strong communication skills:** Effective communication enables them to convey ideas, inspire teams, and attract customers and investors.

These qualities contribute to their ability to build successful businesses and adapt to challenges.

### Quick Tip

Entrepreneurs need creativity, risk-taking, and communication skills for success.



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

**Answer:** Engines can be classified based on their valve arrangements:

1. Overhead Valve (OHV): Valves are placed above the cylinder.
2. Overhead Camshaft (OHC): Camshaft is located in the cylinder head.
3. Side Valve (SV): Valves are located on the side of the cylinder.

These arrangements affect the engine's efficiency, performance, and maintenance.

#### Quick Tip

OHC engines are more efficient and widely used in modern vehicles.

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

**Answer:** A service manual provides detailed instructions for maintaining and repairing vehicles. It includes:

1. Specifications: Torque settings, oil types, and component details.
2. Troubleshooting guides: Steps to identify and resolve issues.
3. Safety measures: Guidelines to ensure safe working practices.

Technicians use service manuals to ensure accurate and efficient repairs.

#### Quick Tip

A service manual is the technician's guide to precise vehicle maintenance.

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

**Answer:** Measuring tools are vital in an automobile workshop for:

1. Accuracy: Ensuring precise measurements for component alignment.
2. Quality control: Maintaining the standard of repairs and replacements.
3. Safety: Reducing risks by ensuring proper torque, pressure, and alignment.
4. Efficiency: Facilitating quick and effective diagnosis and repairs.



### Quick Tip

Tools like calipers and micrometers ensure precision in automobile servicing.

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

**Answer:** Disposing of engine oil and filters involves:

1. Drain and store: Collect used oil in a clean, sealed container to prevent spillage.
2. Dispose filters: Drain filters of residual oil and store them in a separate waste bag.
3. Recycling: Take the oil and filters to a certified recycling center or waste disposal unit.
4. Compliance: Follow local environmental regulations for safe disposal.

### Quick Tip

Recycling engine oil helps reduce environmental pollution and saves resources.

## 15. How can an automobile salesperson ensure the customer, the quality, and efficiency of service repairs and maintenance available in the dealer's department?

**Answer:** An automobile salesperson can assure customers by:

1. Providing a service tour: Showing customers the workshop and its facilities.
2. Highlighting certifications: Sharing technician qualifications and certifications.
3. Demonstrating transparency: Explaining the repair and maintenance process.
4. Sharing customer feedback: Providing testimonials and satisfaction records.

These actions build customer confidence in the dealership's service quality.

### Quick Tip

A service tour is a practical way to assure customers of service quality.

## 16. What do you understand by "hybrid drivetrain" innovation?



**Answer:** A hybrid drivetrain combines an internal combustion engine (ICE) with an electric motor to drive the vehicle. Key features include:

1. Fuel efficiency: Reduced fuel consumption through electric power assistance.
2. Regenerative braking: Converts braking energy into electricity for storage.
3. Lower emissions: Reduces greenhouse gas emissions compared to conventional drivetrains.

Hybrid drivetrain innovation promotes sustainability and efficiency in modern vehicles.

#### Quick Tip

Hybrid drivetrains reduce emissions and improve fuel efficiency.

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

**Answer:** Fuel supply systems include:

1. Gravity feed system: Uses gravity to supply fuel from the tank to the engine (common in motorcycles).
2. Fuel pump system: Uses a mechanical or electric pump to deliver fuel to the engine.
3. Fuel injection system: Supplies fuel directly into the combustion chamber using injectors.

Explanation of Fuel Injection System:

- This system ensures precise fuel delivery, improving efficiency and reducing emissions.
- It works by atomizing fuel into a fine spray, mixing it with air for complete combustion.

#### Quick Tip

Fuel injection systems improve mileage and reduce emissions compared to carburetors.

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

- Answer:**
1. Rinse: Remove loose dirt by spraying water over the vehicle.
  2. Wash: Use car shampoo and a sponge to clean the exterior. Work from top to bottom.



3. Rinse again: Spray water to remove soap and residue.
4. Dry: Use a microfiber cloth to dry the vehicle to avoid water spots.
5. Polish and wax: Apply polish or wax to protect the paint and enhance shine.

#### Quick Tip

Always use microfiber cloths and car-specific shampoos for best results.

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

**Answer:** Types of Measuring Tools:

1. Vernier Caliper
2. Micrometer
3. Depth Gauge
4. Tape Measure

Explanation of Vernier Caliper:

A Vernier caliper measures the internal and external dimensions of an object with high precision. It consists of a main scale, Vernier scale, and jaws to measure thickness, diameter, or depth. Accuracy is typically up to 0.02 mm.

#### Quick Tip

Vernier calipers are versatile for measuring internal, external, and depth dimensions.

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

**Answer:** 1. Customer engagement: Build rapport with potential customers and address queries.

2. Product knowledge: Explain features, benefits, and applications of vehicles.

3. Follow-up: Ensure after-sales support and address customer feedback.

4. Upselling and cross-selling: Suggest additional services or accessories to meet customer needs.



5. Building trust: Deliver consistent and transparent communication to enhance customer satisfaction.

#### Quick Tip

Effective sales representatives focus on building long-term customer relationships.

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**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.**

**Answer:** Top 5 Innovations in Car Safety Technology:

1. Automatic Emergency Braking (AEB): Detects obstacles and applies brakes automatically.
2. Blind Spot Detection: Alerts the driver to vehicles in their blind spots.
3. Adaptive Cruise Control: Maintains a safe distance from the vehicle ahead.
4. Lane Keeping Assist: Helps the car stay centered in its lane.
5. Night Vision Assist: Uses infrared sensors to detect pedestrians and animals in low visibility.

Night Vision Assist: This system provides a clear view of the road ahead at night by detecting objects invisible to the naked eye, ensuring safer driving conditions.

#### Quick Tip

Night Vision Assist enhances safety by improving visibility during night drives.

