

# CBSE | DEPARTMENT OF SKILL EDUCATION

## AUTOMOTIVE (SUBJECT CODE 404)

CLASS X (SESSION 2021-2022)

MARKING SCHEME FOR SAMPLE QUESTION PAPER FOR TERM – II

Max. Time Allowed: 1 Hour (60 min)

Max. Marks: 25

### SECTION A

(3 + 2 = 5 marks)

Answer any 3 questions out of the given 4 questions. Each question is of 1 mark.		1 x 3 = 3
Q.1	Define " <b>Women Entrepreneurship</b> " as per Government of India. <b>Answer:</b> Government of India has defined women entrepreneurship as "an enterprise owned and controlled by a woman having a minimum financial interest of 51 per cent of the capital and giving at least 51 per cent of the employment generated in the enterprise to women."	1
Q.2	Write down many things which an entrepreneur Coordinates. <b>Answer:</b> An entrepreneur coordinates many things like: factors of production, delegated tasks, smooth functioning across different business departments and timely delivery of inputs and outputs etc.	1
Q.3	<b>How many "Sustainable Development Goals" were adopted by UN member states?</b> <b>Answer:</b> <b>17.</b> United Nations Member States in 2015 adopted 17 SDGs (Sustainable Development Goals) as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.	1
Q.4	Every country must ensure that they have a policy towards sustainable development. Write about this type of policy. <b>Answer:</b> Sustainable Development cannot be looked upon as a responsibility of a person, a community, a city or a nation. To achieve Sustainability for next generation, the whole world needs to come as one. It is the responsibility of every country to ensure having a <b>full proof policy</b> towards Sustainable Development.	1
Answer any 1 question out of the given 2 questions. Each question is of 1 mark.		2 x 1 = 2
Q.5	Enlist any 5 myths of entrepreneurship. Briefly explain any one myth. <b>Answer:</b> There are many myths about characteristics and traits of entrepreneurs like: 1. Entrepreneurs are born a certain way 2. Great ideas are what makes entrepreneurs 3. Entrepreneurs have to take a lot of risk 4. Businesses either skyrocket or fail 5. A lot of money is required to start any business 6. One must know everything before starting a business	2
Q.6	Briefly explain importance of sustainable development.	2

	<p><b>Answer:</b></p> <ol style="list-style-type: none"> <li>1. It will ensure that resources like air, water, forests are saved to future generation.</li> <li>2. Problems like Climate Change, Emission of Green House gases can be taken care of with the help of Sustainable Development.</li> <li>3. Adoption of Sustainable Development in our daily life and at our work place will also promote economic growth.</li> </ol>	
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## SECTION B

(4 + 8 = 12 marks)

<b>Answer any 04 questions out of the given 06 questions</b>		<b>1 x 4 = 4</b>
<b>Q.7</b>	<p>Write the method to dispose-off the used oil.</p> <p><b>Answer:</b> (Any two will work)</p> <ol style="list-style-type: none"> <li>1. Storing the waste oil properly for collection and recycling</li> <li>2. Store waste oil in a safe place</li> <li>3. The use of expert services</li> <li>4. Do not pour it down the drain or the septic system</li> <li>5. Use the appropriate heater if burning the oil as a disposal means</li> <li>6. Use waste oil disposal approved equipment</li> <li>7. Dispose of everything associated with the used oil</li> </ol>	<b>1</b>
<b>Q.8</b>	<p>Write down any one system to encourage repeat and referral business.</p> <p><b>Answer:</b> <b>Maintaining an owner follow-up system</b> that encourages repeat and referral business and contributes to customer satisfaction.</p>	<b>1</b>
<b>Q.9</b>	<p>Name the two most important aspects of positive body language.</p> <p><b>Answer:</b> Two of the most important aspects of positive body language are smiling and eye contact.</p>	<b>1</b>
<b>Q.10</b>	<p>How the innovations are taking place in the recent times?</p> <p><b>Answer:</b> In earlier times innovations happened less by planning and more by chance. However, <b>in recent decades innovation processes have become more predictable.</b></p>	<b>1</b>
<b>Q.11</b>	<p>Name the testing method used to make vehicles safer through months of different tests and analysis.</p> <p><b>Answer:</b> Crash testing is the testing method used to make vehicles safer through months of different tests and analysis</p>	<b>1</b>
<b>Q.12</b>	<p>Draw the generic symbol used in any car's service manual which states "<b>Don't do this</b>".</p> <p><b>Answer:</b> The circle with a slash in this manual means "Don't do this" or "Don't let this happen"</p> <div style="text-align: center;">  </div>	<b>1</b>
<b>Answer any 04 questions out of the given 06 questions</b>		<b>2 x 4 = 8</b>

<p><b>Q.13</b></p>	<p>Write different steps to be followed while changing coolant of a car.</p> <p><b>Answer:</b></p> <ol style="list-style-type: none"> <li>1. Take the coolant as recommended by the vehicle manufacture.</li> <li>2. Keep the vehicle in plain space and make engine off for few hours so that engine become cool.</li> <li>3. Keep a pan below radiator.</li> <li>4. Open the radiator cap and see level of coolant.</li> <li>5. Open the drain plug below radiator’s lower tank by using wrench or by hand if possible.</li> <li>6. Coolant will start coming out and let all coolant be empty.</li> <li>7. Fix the drain plug back.</li> <li>8. Fill the radiator to the top with the coolant.</li> <li>9. Make the coolant level up to maximum in reservoir. Turn the engine on and Let it run for several minutes to get any air out of the system. Watch the temperature gauge to make sure the car does not overheat. After the radiator has burped up air bubbles, turn the car off and carefully fill the radiator to the top with coolant. Close the radiator cap tightly. Watch the temperature gauge carefully for the next few days.</li> </ol>	<p><b>2</b></p>
<p><b>Q.14</b></p>	<p>Briefly explain the disadvantages of not getting the vehicle servicing on correct interval.</p> <p><b>Answer:</b></p> <ol style="list-style-type: none"> <li>1. Car's manufacturer ensures warranty if the owner stick to its recommended maintenance. If the owner, doesn't have it serviced accordingly, the warranty will be voided.</li> <li>2. In case of damage to the engine, this could lead to high costs which will not be reimbursed by the manufacturer.</li> <li>3. If someone not getting the vehicle servicing on correct interval he/she is compromising to the car’s safety.</li> <li>4. It can cause premature wear and damage to the car.</li> </ol>	<p><b>2</b></p>
<p><b>Q.15</b></p>	<p>Make a list of at least 5 duties performed by an automobile sales person.</p> <p><b>Answer:</b> <b>(Any 4 will work)</b></p> <ol style="list-style-type: none"> <li>1. Approaches, greets and offers assistance or direction to any customer who enters the dealership.</li> <li>2. Assists customers in selecting a vehicle by asking questions and listening carefully to their responses.</li> <li>3. Explains fully the product performance, application and benefits.</li> <li>4. Describes all optional equipment available for customer purchase.</li> <li>5. Utilizes dealership sales control and follow-up system.</li> <li>6. Exhibits high level of commitment to customer satisfaction.</li> <li>7. Introduces customers to service department personnel.</li> <li>8. Schedules first service appointment.</li> <li>9. Follows up on all post-delivery items, tag/title work, “we-owes”, and special requests to be sure that all customer expectations are met.</li> <li>10. Maintains an owner follow-up system that encourages repeat and referral business and contributes to customer satisfaction.</li> <li>11. Maintains a prospect development system.</li> <li>12. Reviews and analyzes actions at the end of each day, week, month, and year to determine how to better utilize time and plans more effectively.</li> <li>13. Attends sales meetings.</li> <li>14. Maintains a well-groomed and professional appearance.</li> </ol>	<p><b>2</b></p>

<p><b>Q.16</b></p>	<p>Explain importance of Body Language/Communication for an automobile sales person.</p> <p><b>Answer:</b> Most of the communication that we relay to others is done through our body language. If we have a negative body language when we interact with others it can show our lack of care. Two of the most important aspects of positive body language are smiling and eye contact. Make sure to look your customers in the eye. It shows that we are listening to them. And then of course, smiling makes the conversion more positive.</p>	<p><b>2</b></p>						
<p><b>Q.17</b></p>	<p>Prepare a list of five new innovations in car safety technologies. Briefly explain any one of them.</p> <p><b>Answer:</b> <b>(List of 5. And explanation of Any 1 will work)</b> Top five best new innovations in cars safety technology are as under: 1. <b>Tyre pressure monitoring systems:</b> Tyre pressure monitoring systems provide the latest and greatest technology for eliminating low tyre pressure on our cars, which can result in an accident or simply poor gas mileage. A tire pressure monitoring system can also alert us in seconds to a flat tyre, thereby reducing the chances of becoming involved in a car accident due to a flat tyre. 2. <b>Blind-spot detection:</b> Finally! There now is a system for alerting us if we attempt to make a turn and an object or car is in our blind spot. This technology responds as soon as the driver puts on the turn signal, thereby preventing a collision caused by the driver's blind spot. 3. <b>Rollover prevention:</b> Most of the newer SUVs are equipped with electronic stability control systems, but rollover prevention systems take the concept one step further. If you are making a turn too fast and the car senses a potential rollover, the rollover Prevention system will apply the brakes and modulate the throttle as needed to help you maintain control of the vehicle. Ford calls it Roll Stability Control, while GM calls it Proactive Roll Avoidance. 4. <b>Sensitive air bag systems:</b> In older model cars, the airbag deploys when a front-end crash occurs. However, many of today's vehicles come equipped with more sensitive air bag systems, which sense the difference in the size and weight of the occupants and deploys the air bags accordingly. This technology may even be able to detect that an individual is not wearing a seat belt or that he or she is positioned abnormally in the seat and compensate the air bag deployment to accommodate this. 5. <b>Night vision assist:</b> Properly operating a vehicle takes on a whole new meaning during the night time hours. Some of the newest vehicle technology allows drivers to see further down the road, courtesy thermal-imaging cameras, thereby allowing them to spot animals, pedestrians and other vehicles that they normally would not have seen.</p>	<p><b>2</b></p>						
<p><b>Q.18</b></p>	<p>Prepare a table of any 5 Generic symbols with their description commonly used in a workshop service manual.</p> <table border="1"> <thead> <tr> <th>Generic symbols</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>  </td> <td> <p>The circle with a slash in this manual means <b>“Don’t do this”</b> or <b>“Don’t let this happen”</b></p> </td> </tr> <tr> <td>  </td> <td> <p><b>Caution</b></p> </td> </tr> </tbody> </table>	Generic symbols	Description		<p>The circle with a slash in this manual means <b>“Don’t do this”</b> or <b>“Don’t let this happen”</b></p>		<p><b>Caution</b></p>	<p><b>2</b></p>
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	<p><b>Caution</b></p>							

	<b>Warning</b>	
<b>"I"</b>	<b>Inspect, clean, adjust, lubricate or replace as necessary</b>	
<b>"T"</b>	<b>Tighten to Specified Torque</b>	
<b>"A"</b>	<b>Adjust</b>	
<b>"C"</b>	<b>Clean</b>	
<b>"R"</b>	<b>Replace or Change</b>	
<b>"L"</b>	<b>Lubricate</b>	

**SECTION C** **(2 x 4 = 8 marks)**  
**(COMPETENCY BASED QUESTIONS)**

<b>Answer any 02 questions out of the given 03 questions</b>		
<b>Q.19</b>	<p>a) Enlist the different material and tools required for the changing of fuel filter.  <b>Material and tools requirement for the changing of fuel filter</b></p> <ol style="list-style-type: none"> <li>1. Safety glasses or some other eye protection</li> <li>2. Replacement filter</li> <li>3. Screwdriver to undo clamps</li> <li>4. Container to catch fuel that leaks from hoses</li> <li>5. Rags to clean up any spilled fuel, dispose of them if used</li> <li>6. Specialty tools, some vehicles require the use of special tools to disconnect fuel fittings, including the fittings connecting the fuel filter.</li> </ol> <p>b) Also give different steps to be followed while changing fuel filter of a car.  <b>Steps to be followed while changing fuel filter of a car:</b></p> <ol style="list-style-type: none"> <li>1. Take the suitable fuel filter</li> <li>2. Locate the old filter - it may be in the engine compartment or under the car near the fuel tank</li> <li>3. If the vehicle manufacturer has recommended any procedure, follow it to remove fuel pressure</li> <li>4. Unscrew each hose clamp bolt until it nearly comes apart from the nut</li> <li>5. Push the clamp up the hose</li> <li>6. Remove the old filter and replace with new filter</li> <li>7. Run the engine and check for leaks.</li> </ol>	<b>(2+2)=4</b>
<b>Q.20</b>	<p>Explain several key points related to important aspects of customer service.  <b>Answer:</b>  <b>Know your product:</b> The executive must know what products/service you are offering. In other words, be an information expert. It is okay to say 'I don't know', but it should always be followed up by "but let me find out" or possibly "but my friend knows!" Whatever the situation may be, make sure that you don't leave your customer with an unanswered question.  <b>2. Body Language/Communication:</b> Most of the communication is done through executive's body language. If he/she has a negative body language when he/she interact with others it can show his/her lack of care. Two of the most important aspects of positive body language are smile and eye contact. Make sure to look in the</p>	<b>4</b>

	<p>eyes of customers. It shows that he/she is listening to them. And then of course, smiling makes the conversion more positive.</p> <p>3. <b>Anticipate Guest Needs:</b> Nothing surprises a customer more than an employee going the extra mile to help them. Always look for ways to serve any customer in more ways than they expect. In doing so it helps them to know that the executive care and it will leave them with the "Feel Good Factor" that they were searching for.</p>	
<p>Q.21</p>	<p>Make a list of any 5 top innovations of today's automobiles. Explain any two of them.</p> <p><b>Answer:</b>  <b>Global Positioning System (GPS) and Electronic Maps</b>          The electronic mapping technologies used in most vehicles today are a wonder of science and enable people to get just about anywhere without getting lost. Advanced cars today have large onscreen displays that put navigation via the GPS right in their view.</p> <p><b>Run Flat Tires</b>          The most significant from a safety perspective is the development of run flat tires. Common in nearly all tires today, run flat technology enables tires to retain some air and continue operating after they have been punctured.</p> <p><b>Key Fobs</b>          Almost everyone today uses a key fob to open and lock their car. Now, all cars have key fobs that save people from having to remember where they parked their car and having to use a key to open the door. Key fobs have also become an important safety tool, as they are equipped to set off car alarms in the event that a person is mugged or attacked in a parking lot or parking garage.</p> <p><b>Electric Engines</b>          Electric engines are the future of the automotive industry and more vehicles are being outfitted with them all the time.</p> <p><b>Airbags</b>          Safety has improved with each generation of car. And one of the most innovative safety breakthroughs ever has been airbags. And, believe it or not, airbags are still a relatively new innovation. Airbags have continued to evolve over the years, and they are now responsible for saving thousands of lives each year.</p> <p><b>Power Steering and Power Brakes</b>          It used to be a lot more difficult to drive a car, and it required considerable strength to steer and apply the brakes. This was in the age before power steering and power brakes.</p> <p><b>Anti-Lock Brakes</b>          The computerized braking systems help drivers maintain control of their vehicle while stopping, and stabilize cars, preventing them from rolling over on impact. This technology revolutionized the automotive industry, and today ABS is the standard in all makes and models of vehicles.</p> <p><b>Automatic Transmissions</b>          Automatic transmissions are now largely the standard in cars. Manual transmissions that use clutch pedals and gear shifting are still available, but have largely been replaced by automatic transmissions that shift gears electronically and automatically for drivers.</p> <p><b>Quick and wireless charging</b>  <b>Fully autonomous driving systems</b>  <b>Vehicle-to-vehicle and vehicle-to-infrastructure communication</b>  <b>Cars with artificial intelligence.</b></p>	<p>4</p>

