

STEP WISE MARKING SCHEME


CLASS 9TH

AUTOMOTIVE

Q.NO	ANSWERS	MARKS
1	<p>Job card and its filling procedure</p> <ul style="list-style-type: none">• Washing of vehicle and Washing Procedure• Engine Minor tune up• Oil Replacement• Checking of battery electrolyte level and top up• Clutch and brake free play and their adjustment• Lighting System, its various part and their checking• Identification of greasing points of wheelers and procedure of greasing. • Checking of tyre inflation and procedure of inflation. <p style="text-align: center;">OR</p> <ol style="list-style-type: none">1. Drive the vehicle with care everyday2. Be patient during the accident or breakdown of a vehicle, call helpline number of vehicle or police or hospital3. Buy petrol at reputable service stations4. Don't fill up if you see the tanker5. Go easy when you're stuck6. Car key chain should be lighten7. Preserve your car during long-term storage8. Park in the shade9. Clean the inside, too10. Clean dash gauges carefully	5
2	<ul style="list-style-type: none">• Fuel tank• Fuel lines• Fuel pump (A.C. mechanical type or electrical type)• Fuel filter• Carburettor• Inlate manifold• Air cleaner <p>Note: In case of modern MPFI engines carburetor is replaced by injectors and sensor.</p> <p style="text-align: center;">OR</p> <p>Cylinder. The cylinder of an I.C. engine is considered as the main body of the engine in which piston reciprocates to develop power. It has to withstand very high pressures (about 70 bar) and temperatures (about 22000C) because there is direct combustion inside the cylinder. Therefore, its material should be such that it can retain strength at high temperatures, should be good conductor of heat and should resist to rapid wear and tear due to reciprocating parts.</p> <p>Piston - Piston is the heart of the engine. The functions of the piston</p>	5

	<p>are to compress the charge during compression stroke and to transmit the gas force to the connecting rod and then to the crank during power stroke. The pistons of I.C. engines are usually made of cast iron.</p> <p>Connecting Rod- It is usually a steel forging of circular, rectangular, I,T, or H section and is highly polished for increased strength. Its small end forms a hinge and pin joint with the piston and its big end is connected to the crank by crank pin. It has a passage for the transfer of lubricating oil from the big end bearing to small end bearing (gudgeon pin).</p>	
3	<p>Hero make - Impulse, Splendor, CDdawn, Pleasure, Passion Plus Bajaj make - Pulsar , Discover, Platina TVS make - Apache, Star, Scooty streak, Scooty Pep, Star City Honda make - Activa, Dio, aviator Suzuki make - Access, Intruder M800, Zeus</p> <p style="text-align: center;">OR</p> <p>Bulldozer : A bulldozer is a crawler (continuous tracked tractor) equipped with a substantial metal plate (known as a blade) used to push large quantities of soil, sand, rubble, or other such material during construction or conversion work and typically equipped at the rear with a claw-like device (known as a ripper) to loosen densely compacted materials.</p> <p>Road Roller: A road roller (sometimes called a roller-compactor, or just roller) is a compactor type engineering vehicle used to compact soil, gravel, concrete, or asphalt in the construction of roads and foundations. Similar rollers are used also at landfills or in agriculture. In some parts of the world, road rollers are still known colloquially as steam rollers, regardless of their method of propulsion.</p> <p>Dumper : Dumper is a vehicle designed for carrying bulk material, often on building sites. Dumpers are distinguished from dump trucks by configuration. A Dumper is usually an open 4-wheeled vehicle with the load skip in front of the driver, while a Dump Truck has its cab in front of the load. The skip can tip to dump the load; this is where the name "dumper" comes from. They are normally diesel powered. A towing eye is fitted for secondary use as a site tractor. Dumpers with rubber tracks are used in special circumstances and are popular in some countries.</p>	5
4	<p>RADITOR HOSE PIPE FAN WATER PUMP THERMOSTATE VALVE</p>	3
5	<p>Language Visual Perception Past Experience Prejudice Feelings Environment Personal factors Culture</p> <p style="text-align: center;">OR</p>	3

	Company Vehicle Low grade fuel etc.	
6	Daily Inspection (DI) - It is the responsibility of a driver or owner of a vehicle to carry out the following inspection/checks daily before the starting of engine to avoid any type of breakdown on the road. <ul style="list-style-type: none"> • Check all the tyre pressure visually or hitting the tyre wall with the help of a stone piece and judging the sound. • Check radiator coolant level. • Check the fan belts for looseness. 	3
7	<ul style="list-style-type: none"> • Driving in drunk condition. • Driving in sleepy condition • Using cell phone while driving 	3
8	Cooling System: As our body requires air and water for cooling our system similarly engine also requires cooling. The cooling system has three primary functions. These functions are as follows: <ol style="list-style-type: none"> 1. Remove excess heat from the engine. 2. Maintain a constant engine operating temperature. 	3
9	As you know that our body requires fluids like water and also oil in the form of fats like ghee, butter, cooking oil for maintenance of our system. <ol style="list-style-type: none"> 1. To reduce friction between moving parts to its minimum value so that power loss is minimized. 2. To reduce wear of the moving parts as far as possible. <p style="text-align: center;">OR</p> Commercial Vehicles- A Commercial Vehicle is a type of motor vehicle that may be used for transporting of goods as well passengers. Commercial vehicles influence the trade, commerce and industry of a country in a major way. Vehicles falling under this category are mainly buses & trucks.	3
10	When you are meeting someone for the first time, or if others want to know about you, you need to 'Introduce' yourself. You can do this by telling your name and some general information like about your hometown, your job or subjects as a student, your interests, etc.	2
11	Information can be recorded or stored in many ways. It can be hand-written on paper, typed using a typewriter or a computer and so on. When information is stored and recorded on electronic devices, it takes on a 'digital' form.	2
12	Communication skills are those skills which are needed to speak and write properly. A person who is able to speak appropriately whilst maintaining eye contact with the audience, uses varied vocabulary and articulate speech to suit the need of the audience is generally said to be an effective speaker. <p style="text-align: center;">OR</p> A hybrid vehicle is a vehicle that uses two or more distinct power sources to move the vehicle. Hybrid vehicle is known as Hybrid Electric	2

	vehicles (HEVs). This vehicle combines an internal combustion engine and electric motors	
13	Use electric and CNG vehicle Do not use vehicle when not required	2
14		2
15	<p>Indian Automobile Scenario- We should now look at the Automobile industry in India. It started with import of cars for Royal families. Perhaps the first cars imported in India were in 1920s. For many years India did not have any manufacturing capability of its own. Hindustan Motors is one of the original car manufacturers in India</p> <p style="text-align: center;">OR</p> <p>Wheel cart is a vehicle designed for transport, using two wheels. A handcart is pulled or pushed by one or more people. However, from history we learn that animals instead of men were used for pulling the cart.</p>	2
16	(A) Light	1
17	(B) 3500	1
18	(A) 1	1
19	© 1988	1
20	A-Window	1
21	A-Command	1
22	Cntrl+X	1
23	100 mtr.	1
24	Top Dead Center	1
25	Bottom Dead Center	1
26	Compressed Natural gas	1
27	Central processing unit	1
28	False	1
29	False	1
30	True	1