Top 18 Auto Mechanic Interview Questions & Answers

1) Explain how you can keep your car in good condition?

Regular check-up of parts like

- Check battery
- Tyres and brakes
- Fluid levels (Coolant, Washer fluid, Brake fluid, Oil, Power steering, etc.)
- Fuel filters and Injectors
- Belts and hoses
- Alternator
- Lubrication of wheel
- Bearing and ball joints

2) How often does a car requires services?

Car requires services yearly and major maintenance at 6,000 miles.

3) Before buying a used car what things you should look for?

- Any leakage of oil underneath the car
- Check any leakage of coolant water from the radiator
- Check battery condition
- Check whether car emits blue gray, dense smoke or a normal smoke from exhaust pipe
- Watch out for engine noises, any vibrations, lack of power or any other issues
- Check for any burning smells when open the hood
- Check steering wheel, driver’s seat and inner door
- Check tyres (Edge should not worn out, no bulge on the sidewall, no cuts, enough groves to hold the road)
- Check all meter work fine when you start the car
4) Explain how timing belt works?

Timing belt rests on the crankshaft pulley and either one or two camshaft pulley; they are all align through timing belt. The closing and opening of engine valves are controlled by camshaft to let in air and fuel mixture or exhaust gas, if you do not have a timing belt or damaged timing, it will directly affect the timing of opening and closing of engine valves. This is the reason it is called timing belt and if not in a good position, it will damage your engine.

5) Explain what is the difference between Crankshaft and Camshaft?

- **Crankshaft**: It is linked to the pistons by the connecting rods, the force produced by the fuel-air mixture is transmitted to the crankshaft and converted to rotary motion as the crankshaft turns.

- **Camshaft**: It controls the intake and exhaust valves. It is linked with crankshaft either by timing chain or belt, and it turns one rotation for each two rotations of the crankshaft, for each valve it operates- the cam opens each valve at the correct time to draw fuel and air mixture or expel the exhaust gas.

6) What may cause engine overheat?

Engine gets overheat when

- Coolant leaks
- Cooling system clogged
- Weak radiator cap
- Thermostat stuck shut
- Inoperative electric cooling fan
- Bad fan clutch, slipping fan belt, missing fan shroud
- Too high or low concentration of anti-freeze
• Collapsed radiator hose or debris in the radiator
• Restricted exhaust system

7) What is automotive charging system is made up of?

Automotive charging system is made up of

• Battery
• Voltage Regulator
• Alternator

8) What is the standard reading in voltmeter for functional battery?

For functional battery, the standard reading for voltmeter is 14-15 which is normal, but if reading shows 13 or less then, there is a problem with the battery.

9) How can you judge whether the problem is due to alternator and not due to battery?

To judge the problem for an alternator, there are few steps you can try

• Run your car and unplug the positive connection of the battery, if the car stops then it is more likely there is a problem with the alternator
• Another way of checking alternator is by checking interior lights, usually an alternator charges your car battery when the car is on. If the interior lights come on brightly and fades away slowly, it indicates that the alternator cannot keep a charge when the car is running. It means there is a problem with the alternator.
• You can also check by racing your car with headlights on, if the light brighten up when you race the car and lose power when you slow it down, indicates a problem with the alternator

10) Explain what are the components in alternator and how it works?

An alternator consists of the stator, rotor and copper wiring. The rotor and stator are belt driven magnets encased in copper wiring, which creates a magnetic field. This belt is connected with engine, so when engine starts it rotates the rotor and generate a magnetic field. Stator converts this magnetic field into voltage that flows to the diode. The diode assembly converts the AC electricity to DC, which is used by car battery.

11) What are the important components of Engine lubrication system?

Important components of engine lubrication system includes

• Oil pan: It is a container where engine oil settles down when car is not running
• Pickup tube: When engine starts oil get sucked up through pickup tube
• Oil pump: The pump will help to slide up oil into the tube against the gravity
• Pressure relief valve: It relieves the pressure on oil
• Oil filter: It removes dirt and debris form the oil
• Spurt holes and galleries: These are the holes in the crankshaft or other parts of the engine through which oil streams and make them lubricated
• Sump: Once it has lubrication job is done it will go back again into oil pan or sump

12) Explain what is kingpin offset?

Kingpin offset the part, which is usually used as a pivot in the vehicles steering.

13) What do you mean by CC when mentioning car efficiency?

CC stands for Cubic Centimetres; it tells the total volume of the engine cylinder. It indicates that the automobile with more CC produces more power than the other engines.

14) How petrol engine is different than diesel engine?

• Petrol engine: Petrol engine works on the principle of Intake (fuel + air), Compression, Power and Exhaust. It means the fuel, and air will enter the combustion chamber, piston come upwards and compress the fuel. The compressed fuel comes in contact with spark plug and produces a spark that push piston down
• Diesel Engine: In diesel engine the phenomenon is slightly different, there is no sparkplug in diesel engine. In here only air enters in the burning chamber, when piston is pushed up by motor, it will compress the air in the chamber, making it hot. Now valve opens and inject diesel, because of compressed air, the diesel blasts and push the piston down

15) Explain clutch system works?

Clutch system is made up of two metal plates adjacent to the engine. When you press the clutch pedal down the plates come apart separating the engine from the drive wheels allowing the drivers to change the gear, and re-engage the plates again with the engine once the gear is changed

16) Explain what is the benefit of dual clutch transmission?

The dual clutch transmission allows gears to be pre-selected before they are changed, so one clutch selects the second gear while the second clutch selects the third gear. There are usually seen in race cars

17) Explain what do you mean by independent suspension?

Independent suspension is referred to the mounting of the wheel on a separate axle. So, that road shocks affect only the particular wheel.
18) **Mention the injector pressure in heavy vehicle?**

Injector pressure in heavy vehicle is about 220 kg/cm square.