Sm test name 1 Source of electrical power

1. Changes alternating (AC) current to direct (DC) current
2. **List four oil contaminants**

1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4

\_\_\_\_\_\_\_a. Helps prevent failure of alloy bearings from corrosive acids caused by combustion

\_\_\_\_\_\_\_b. Prevents acid, varnish, and sludge formations

\_\_\_\_\_\_\_c. Prevents rusting of metal parts during storage or downtime

\_\_\_\_\_\_\_d. Helps oil give top lubricating protection at both high and low temperatures

\_\_\_\_\_\_\_e. Prevents wax crystals from congealing in cold weather and forming clumps

\_\_\_\_\_\_\_f. Assures lubrication where extreme pressures between close tolerances are encountered

\_\_\_\_\_\_\_g. Helps keep metal surfaces clean and prevents deposit formation

\_\_\_\_\_\_\_h. Helps prevent air bubbles which would restrict lubrication

Anti-rust Oxidation inhibitor Anti-corrosion

Viscosity index improver Pour point depressant

Extreme pressure Foam inhibitor

Detergent-dispersant

5 Unit of measurement for electrical current.

6 Unit of electrical pressure or force that will move a current of one ampere through a resistance of one OHM.

7 Wire touching another wire and providing a shorter path for current to flow.

8 Measures the rate of current flow.

9 State the purpose of the ignition system .‘\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

10 Stores extra current as the contact points open to prevent arcing and burning.

11 Make break the primary circuit to allow the coil to produce high voltage at the spark plug

12 Device which converts mechanical or electrical power into rotating motion for cranking engine

**Fuel Systems**

Match the terms on the right with their correct definitions.

\_\_\_\_\_\_a. correct proportion of fuel and air needed for good combustion

\_\_\_\_\_\_b. Restriction in the carburetor which makes the air speed up, causing a high vacuum.

\_\_\_\_\_\_c. breaking of a liquid into tiny particles or globules to aid vapor formation

\_\_\_\_\_\_d. Tube in a stream of air inside the venture which creates an air pattern with low pressure on one side.

\_\_\_\_\_\_e. transferring a substance into a gaseous state

\_\_\_\_\_\_f. Acts as a reservoir to store fuel for engine use.

\_\_\_\_\_\_g. Prevents dirt or foreign matter from entering the carburetor

\_\_\_\_\_\_h. Mixes fuel and air in the proper proportion for a combustible mixture

\_\_\_\_\_\_i. Pumps fuel from the fuel tank to the carburetor

\_\_\_\_\_\_j. Carries fuel from the furl tank to the carburetor.

\_\_\_\_\_\_k. Filters grit and dust from the air entering the carburetor

\_\_\_\_\_\_l Sheet of metal or other material that is sufficiently flexible to permit vibration

Venturi Airfoil Atomization Vaporization

Metering Fuel Line Fuel Tank Carburetor

Pump Diaphragm Fuel Filter Air Cleaner Fuel Pump

13 List two causes of overheating

\_\_\_\_\_\_1. Any agent that produces or tends to produce motion

\_\_\_\_\_\_2. Rate at which work is done

\_\_\_\_\_\_3. Ability to do work

\_\_\_\_\_\_4. Stored energy

\_\_\_\_\_\_5. Measurement for turning effort

\_\_\_\_\_\_6. Transmission and control of motion through the use of gears, pulleys, shafts, and other mechanical devices

\_\_\_\_\_\_7. Bottom dead center

\_\_\_\_\_\_8. To exercise restraining or directing influence over working forces

\_\_\_\_\_\_9. Back and forth motion

\_\_\_\_\_10. Relaying of a working force

\_\_\_\_\_11. Measurement of work accomplished in a given period of time

\_\_\_\_\_12. Pounds per square inch; most common unit for measuring pressure

\_\_\_\_\_13. Series of events or operations that happen regularly and lead back to the starting point

\_\_\_\_\_14. Resistance to relative motion between two bodies contact

\_\_\_\_\_15. Results of force overcoming a resistance over a definite distance

\_\_\_\_\_16. Tope dead center

\_\_\_\_\_17. Total volume of air-fueled compressed by the piston in traveling from BDC to TDC

\_\_\_\_\_18. Cubic inch displacement

\_\_\_\_\_19. Action or operation of burning

\_\_\_\_\_20. Distance the piston moves when traveling from TDC to BDC

\_\_\_\_\_21. Diameter of the cylinder

energy work force friction

power kinetic energy g. torque horsepower

potential energy PSI Cycle TDC

mechanical power transmission reciprocating motion

BDC control

Match the terms with their correct definitions.

\_\_\_\_\_a. spring attached to a valve to return it to the seat

\_\_\_\_\_b Device for alternately opening and closing a passage

\_\_\_\_\_c. Off-center or eccentric enlargement on the camshaft which converts rotary motion to reciprocating motion for operating a valve

\_\_\_\_\_d. Brief period when both intake and exhaust valves are open

\_\_\_\_\_e. upward movement of piston which permits fuel air mixture to enter cylinder

\_\_\_\_\_f. downward movement of piston which compresses fuel-air mixture to enter cylinder

\_\_\_\_\_g. Push rod or plunger placed between the cam and the valve on an engine

\_\_\_\_\_h. matched surface upon which the valve rests

\_\_\_\_\_i. shaft which contains lobes or cams to operate engine valves

\_\_\_\_\_j. Engine component which opens during exhaust stroke and allows burnt gases to be expelled from cylinder

\_\_\_\_\_k. Upward piston movement which expels burnt gases from cylinder

\_\_\_\_\_l. Downward piston movement caused by spark ignition of compressed fuel air mixture

\_\_\_\_\_m. Engine component which opens to allow fuel air mixture to enter cylinder during intake stroke

. Exhaust Power stroke Valve seat camshaft

intake stroke cam lobe valve valve spring

intake valve overlap compression stroke

exhaust stroke valve lifter or tappet