

Duration: 150 Mins

Total Marks: 156

Q.ID: ITISKILL0660WE

1. How the lead acid Battery is classified?

- A) Secondary cell                      B) Dry cell  
C) Alkaline cell                         D) Primary cell

**Answer: A) Secondary cell**

2. Which valve save the pneumatic brake components against damage?

- A) Unloader valve                        B) Check valve  
C) Relay valve                            D) Brake valve

**Answer: A) Unloader valve**

3. What is the function of hydraulic oil in hydraulic system?

- A) Increase the volume                 B) Transmit power  
C) Reduce the pressure                 D) Increase the heat

**Answer: B) Transmit power**

4. What is the colour of positive plates in the charged lead - acid - battery?

- A) White                                      B) Black  
C) Brown                                     D) Grey

**Answer: C) Brown**

5. How many national automotive testing and R&amp;D infrastructure projects (NATRIP) are established in India?

- A) 4    B) 7  
C) 5    D) 6

**Answer: B) 7**

6. A cycle consisting of one constant pressure, one constant volume and two isentropic processes is known as

- A) Constant volume                      B) Constant pressure  
C) Diesel Cycle                            D) Isothermal

**Answer: C) Diesel Cycle**

7. Which valve regulate the flow rate in hydraulic system?

- A) Delivery                                 B) By pass  
C) Pressure relief                         D) Non return

**Answer: A) Delivery**

8. What is the type of inner drive gear used in the internal gear oil pump?

- A) Helical gear                              B) Spiral gear  
C) Rotor gear                                D) Spur gear

**Answer: D) Spur gear**

9. What is the smallest reading of vernier caliper?

- A) Deviation                                B) Tolerance  
C) Least count                             D) Allowance

**Answer: C) Least count**

10. Which of the following fuel quality determines to evaporate?

- A) Cetane number                         B) Octane number  
C) Viscosity                                 D) Volatility

**Answer: D) Volatility**

11. What is the process of driving exhaust gases in two stroke engine out of cylinder?

- A) Intaking                                 B) Super charging  
C) Combustion                             D) Scavenging

**Answer: D) Scavenging**

12. What is the formula for Frictional horse power (FHP)?

- A) IHP / BHP                                B) BHP / IHP  
C) IHP - BHP                               D) IHP + BHP

**Answer: C) IHP - BHP**

13. Which valve safe guards the hydraulics jack?

- A) Relief valve                              B) Shut off valve  
C) Non return valve 1                     D) Non return valve 2

**Answer: A) Relief valve**

14. What is the purpose of valve in AC fuel pump?

- A) Allow the fuel to suck and deliver    B) Supply correct quantity of fuel  
C) Creating pressure                        D) Creating suction

**Answer: A) Allow the fuel to suck and deliver**

15. Which device converts mechanical energy into pneumatic energy?

- A) Compressor                              B) Actuator  
C) Generator                                D) Alternator

**Answer: A) Compressor**

16. What is the use of Ohmmeter in an electrical circuit?

- A) Measure the power                      B) Measure the current

C) Measure the resistance      D) Measure the voltage

**Answer: C) Measure the resistance**

**17.** Which law is applied in hydraulic brake system?

A) Charles law                      B) Pascal's law  
C) Newton's law                    D) Boyle's law

**Answer: B) Pascal's law**

**18.** Which instrument is prohibited to connect with live wire?

A) Ammeter                        B) Voltmeter  
C) Wattmeter                      D) Ohmmeter

**Answer: D) Ohmmeter**

**19.** Which valve is to be closed before lifting the load with hydraulic jack?

A) Non return valve-1            B) Non return valve-2  
C) Relief valve                      D) Shut of valve

**Answer: D) Shut of valve**

**20.** Which plier used for bending narrow strips of thin metal sheet?

A) Internal circlip plier          B) Flat nose plier  
C) Round nose plier              D) Slip joint plier

**Answer: B) Flat nose plier**

**21.** How the semi conductor material can be identified with atomic structure?

A) Two electrons in the outer B) Three electrons in the  
most orbit                            outer most orbit  
C) Five electrons in the outer D) Four electrons in the  
most orbit                            outer most orbit

**Answer: D) Four electrons in the outer most orbit**

**22.** Which act as a seal in the external gear pump?

A) Driven gear                      B) Drive gear  
C) Gear meshing                    D) Housing

**Answer: C) Gear meshing**

**23.** Which is the power developed in an engine?

A) RHP                                B) IHP  
C) IHP                                D) BHP

**Answer: B) IHP**

**24.** Which association of india is playing crucial role in less pollution?

A) ARAI (Automotive              B) AIA (Automotive industry  
research association of India) Association)  
C) AAI (Automobile                D) AASI (Automobile  
Association of India)                Association if South India)

**Answer: A) ARAI (Automotive research association of India)**

**25.** What does number 25 in the cable size (25/0.012) indicate?

A) Length of the strand          B) Thickness of the cable  
C) Number of the strand          D) Diameter of the strand

**Answer: C) Number of the strand**

**26.** Which electronic component is used as a solid state switch?

A) Resistor                          B) Inductor  
C) Capacitor                        D) Transistor

**Answer: D) Transistor**

**27.** Which measure the liquid's resistance of flow?

A) Viscosity                        B) Gravity  
C) Elasticity                        D) Quality

**Answer: A) Viscosity**

**28.** How many cells are in the 12V Battery?

A) 9 cells                              B) 2 cells  
C) 6 cells                              D) 12 cells

**Answer: C) 6 cells**

**29.** Which part in the internal gear pump act as seal?

A) Crescent-shaped spacer      B) Gasket  
C) Sealing ring                      D) Gears

**Answer: A) Crescent-shaped spacer**

**30.** Which service equipment is used to lift a car?

A) Hydraulic press                B) Hydraulic valve  
C) Hydraulic hoist                D) Arbor press

**Answer: C) Hydraulic hoist**

**31.** When did first car rolled in the street of Calcutta?

A) 1810                                B) 1910  
C) 1887                                D) 1950

**Answer: C) 1887**

**32.** Which spanner used for zero setting in outside micrometer?

A) Double end spanner          B) Hooks spanner  
C) Adjustable spanner          D) Ring spanner

**Answer: B) Hooks spanner**

**33.** Which engine has more length?

A) Radial engine                    B) 'V' engine  
C) Inline engine                    D) Opposed engine

**Answer: D) Opposed engine**

**34.** Which instrument is used to check the run-out of crankshaft journals?

- A) Vernier gauge                      B) Dial test indicator  
C) Telescopic gauge                  D) Bore dial gauge

**Answer: B) Dial test indicator**

**35.** How the screw driver is specified?

- A) Thickness and length              B) Length of blade and width of tip  
C) Width and diameter of the edge    D) Shape and length

**Answer: B) Length of blade and width of tip**

**36.** What is indicated horse power?

- A) Power developed in the propeller shaft    B) Power developed in the cylinder  
C) Power developed in the wheel                D) Power developed in the flywheel

**Answer: B) Power developed in the cylinder**

**37.** What is the volume of the space above the piston at TDC?

- A) Total volume                        B) Displace volume  
C) Clearance volume                  D) Swept volume

**Answer: C) Clearance volume**

**38.** Which one is the indirect measuring instrument?

- A) Inside micrometer                  B) Inside caliper  
C) Outside micrometer                D) Steel rule

**Answer: B) Inside caliper**

**39.** Which hand tool used for circular cut in sheet metal work?

- A) Combination plier                  B) Side cutting plier  
C) Bend snip                            D) Straight snip

**Answer: C) Bend snip**

**40.** Which gauge used to check the spark plug gap?

- A) Vernier gauge                        B) Feeler gauge  
C) Telescopic gauge                  D) Pitch gauge

**Answer: B) Feeler gauge**

**41.** How can identify a two stroke engine?

- A) Cavities                              B) Passages  
C) Ports                                  D) Valves

**Answer: C) Ports**

**42.** Which shell electrons has least energy?

- A) K shell electron                    B) L shell electron  
C) M shell electron                  D) N shell electron

**Answer: A) K shell electron**

**43.** How many flywheel rotation requires to complete one cycle in two stroke engine?

- A) One                                      B) Three  
C) Four                                    D) Two

**Answer: A) One**

**44.** Which is the engine called as constant volume cycle?

- A) S.I engine                            B) Steam engine  
C) Turbine engine                      D) C.I engine

**Answer: A) S.I engine**

**45.** What is brake horse power?

- A) Power available at fly wheel        B) Power available at the cylinder  
C) Power available at the wheels        D) Power available at the gear box

**Answer: A) Power available at fly wheel**

**46.** When the valve clearance to be adjusted?

- A) Fully opened                        B) Partially closed  
C) Fully closed                         D) Just opened

**Answer: D) Just opened**

**47.** What is the specific gravity reading range of half charged battery?

- A) 1.170 - 1.200                      B) 1.200 - 1.230  
C) 1.230 - 1.260                      D) 1.260 - 1.280

**Answer: B) 1.200 - 1.230**

**48.** What is the working media in pneumatic system?

- A) Diesel                                  B) Steam  
C) Oil                                        D) Air

**Answer: D) Air**

**49.** How many switching position in 4/2 directional control valve?

- A) Four                                    B) One  
C) Two                                      D) Three

**Answer: C) Two**

**50.** Which precision instrument used for taking external, internal and depth measurement?

- A) Depth micrometer                  B) Inside micrometer  
C) Outside micrometer                D) Vernier caliper

**Answer: D) Vernier caliper**

**51.** What is the permissible voltage drop in the electrical circuit?

- A) 0.4 V                                  B) 0.3 V  
C) 0.2 V                                  D) 0.1 V

**Answer: C) 0.2 V**

**52.** Where the emulsion tube is provided in solex carburetor?

- A) Cold starter                      B) Idle jet  
C) Main jet                            D) Choke

**Answer: C) Main jet**

**53.** Which digit indicate the engine type in 17 digit of win number?

- A) 8 digit                                B) 3 digit  
C) 2 digit                                D) 5 digit

**Answer: A) 8 digit**

**54.** Which type of chisel used to remove excess metal from welded joint?

- A) Half round chisel                B) Flat chisel  
C) Cross cut chisel                 D) Diamond point chisel

**Answer: B) Flat chisel**

**55.** Which device have the ability to store electrical charge?

- A) Resistor                              B) Conductor  
C) Capacitor                            D) Insulator

**Answer: C) Capacitor**

**56.** What type of emf is proceduced if the conductor moved and cut the magnetic fied?

- A) Statistically induced emf        B) Electro-magnetic induced emf  
C) Dynamically induced emf       D) Electro-chemical induced emf

**Answer: C) Dynamically induced emf**

**57.** Which type of socket spanner can be turned to an angle?

- A) Spark plug socket spanner      B) Swivel socket spanner  
C) Deep socket spanner            D) Socket spanner

**Answer: B) Swivel socket spanner**

**58.** Which of the following fuel quality determines fuel to flow?

- A) Volatility                              B) Viscosity  
C) Octane number                    D) Cetane number

**Answer: B) Viscosity**

**59.** What is the distance covered by the spindle in one full rotation of thimble in outside micrometer?

- A) 2 mm                                  B) 0.5 mm  
C) 1.5 mm                                D) 1.0 mm

**Answer: B) 0.5 mm**

**60.** What is the use of ball pein hammer head?

- A) Strike soft metal                    B) Spread the metal In all direction  
C) Stamp the specifications        D) Strike the metal

**Answer: B) Spread the metal In all direction**

**61.** Which part operates the brake shoe in the hydraulic brake system?

- A) Wheel cylinder                      B) Break pedal  
C) Master cylinder                    D) Break drum

**Answer: A) Wheel cylinder**

**62.** How many crank shaft rotations required to get one power in four stroke single cylinder diesel engine?

- A) Four                                    B) One  
C) Three                                  D) Two

**Answer: D) Two**

**63.** What is the specification of 6J x 15?

- A) Wheel rim size                      B) Tyre size  
C) Engine size                         D) Vehicle size

**Answer: A) Wheel rim size**

**64.** What is the purpose of throttle valve in the carburetor?

- A) Always holds correct fuel        B) Filter the fuel  
C) Controls air fuel mixture         D) Excess supply of fuel at idle

**Answer: C) Controls air fuel mixture into the engine**

**65.** Which type of the circuit leads to hazard effect?

- A) Short circuit                         B) Parallel circuit  
C) Series circuit                        D) Open circuit

**Answer: A) Short circuit**

**66.** Which type of brake used in heavy vehicle parking?

- A) Pneumatic brake                    B) Electrical brake  
C) Hydraulic                            D) Mechanical

**Answer: D) Mechanical**

**67.** Which of the following fuel quality determines burning property of petrol?

- A) Cetane number                      B) Viscosity  
C) Octane number                      D) Volatility

**Answer: C) Octane number**

**68.** Which type of pump used in the hydraulic jack?

- A) Gear pump                             B) Plunger pump  
C) Vane pump                            D) Internal gear pump

**Answer: B) Plunger pump**

**69.** Which material is required to make integrated circuit chips?

- A) silicon                                 B) copper  
C) steel                                    D) zinc

**Answer: A) silicon**

**70.** What is the purpose of the cross pein in the hammer?

- A) Strike the metal  
C) Strike the metal in all direction
- B) Fix the handle  
D) Spread the metal in one direction

**Answer: D) Spread the metal in one direction**

**71.** Which gauge used to check leakage of inlet manifold?

- A) Feeler gauge  
C) Pressure gauge
- B) Emission gauge  
D) Vacuum gauge

**Answer: D) Vacuum gauge**

**72.** What is the purpose of needle valve in carburetor?

- A) Excess supply of fuel at idle  
C) Decrease the fuel pressure
- B) Always holds correct level of fuel  
D) Controls the air flow of the engine

**Answer: B) Always holds correct level of fuel**

**73.** What is the energy conversion of battery during charging?

- A) Electrical energy into mechanical energy  
C) Electrical energy into heat energy
- B) Chemical energy into electrical energy  
D) Electrical energy into chemical energy

**Answer: D) Electrical energy into chemical energy**

**74.** How the set of operations performed in sequence of motion of the piston in an engine produce power is called?

- A) Stroke  
C) Cycle
- B) Stroke  
D) Efficiency

**Answer: C) Cycle**

**75.** Which engine has carburetor?

- A) Mineral oil  
C) Kerosene
- B) Diesel  
D) Petrol

**Answer: D) Petrol**

**76.** Which is used for marking and setting of work?

- A) V- Block  
C) Bench vice
- B) Surface plate  
D) Marking table

**Answer: A) V- Block**

**77.** What is the advantage of free maintenance sealed battery?

- A) No need for check and top up distilled water.  
C) No chance for sulphation of battery terminals
- B) No need for recharging of battery  
D) No need for disconnect the terminals to remove battery

**Answer: A) No need for check and top up distilled water.**

**78.** Which instrument is used to measure the electrical resistance?

- A) Ohmmeter  
C) Voltmeter
- B) Ammeter  
D) Wattmeter

**Answer: A) Ohmmeter**

**79.** What is the effect if the unloader valve is in open position?

- A) Release the air to the brake valve  
C) Allow the air in to the air tank
- B) Continuously allow the air to the atmosphere  
D) Maintain the required air pressure

**Answer: B) Continuously allow the air to the atmosphere**

**80.** What is the net resistance 'R' if 'R1' and 'R2' resistance are connected in series?

- A)  $R = R1 + R2$   
C)  $R = R1 \cdot R2$
- B)  $R = R1/R2$   
D)  $R = R1 \times R2$

**Answer: A)  $R = R1 + R2$**

**81.** Which measuring instrument used to measure the Ampere, volt and resistance?

- A) Wattmeter  
C) Multi meter
- B) Energy meter  
D) Galvana meter

**Answer: C) Multi meter**

**82.** Which refers the size of hexagonal Allen key?

- A) Size across the flat  
C) Size of the diameter
- B) Size of the radius  
D) Size of the diagonal

**Answer: A) Size across the flat**

**83.** Which is the Ohm's Mathematical Expression?

- A)  $I=(R/V)$   
C)  $R=(I/V)$
- B)  $V=(I/R)$   
D)  $I=(V/R)$

**Answer: D)  $I=(V/R)$**

**84.** What is the power flow of pneumatic system?

- A) Compressor - Actuator - Control valve  
C) Actuator - Control valve - Compressor
- B) Compressor - Control valve - Actuator  
D) Control valve - Compressor - Actuator

**Answer: B) Compressor - Control valve - Actuator**

**85.** How the ports are opened and closed in two stroke engine?

- A) Movement of Rocker arm  
C) Movement of piston
- B) Movement of valve  
D) Movement piston pin

**Answer: C) Movement of piston**

**86.** Which is the engine having cylinders in 180 Degree?

- A) Radial engine  
C) Opposed engine
- B) V- engine  
D) Inline engine

**Answer: C) Opposed engine**

87. Which device used to step up the voltage in the spark ignition system?

- A) Ignition coil
- B) Spark plug
- C) High Tension Cable
- D) Condenser

**Answer: A) Ignition coil**

88. Which law states that the pressure intensity of a static liquid equal in all direction?

- A) Newton's law
- B) Pascal's law
- C) Boyle's law
- D) Charle's law

**Answer: B) Pascal's law**

89. How the AC mechanical pump's fuel delivery pressure is determined?

- A) Maximum stroke of diaphragm
- B) Maximum deflection of diaphragm
- C) Size of the pumping chamber
- D) Spring pressure on diaphragm

**Answer: A) Maximum stroke of diaphragm**

90. Which service unit act as filter, regulator and lubricator in the pneumatic system?

- A) Air service unit
- B) Valve unit
- C) Compressor unit
- D) Actuator unit

**Answer: A) Air service unit**

91. What is the direction of driven gear in an external gear pump?

- A) Perpendicular direction
- B) Inclined direction
- C) Opposite direction
- D) Same direction

**Answer: C) Opposite direction**

92. Which gauge is used to check the inflation of tyre?

- A) Feeler gauge
- B) Pressure gauge
- C) Wire gauge
- D) Vacuum gauge

**Answer: B) Pressure gauge**

93. What is the purpose of colour code in cables?

- A) Refers the size of the wire
- B) Colour refers the current rating
- C) Colour refers the voltage rating
- D) Easy identification of each circuit

**Answer: D) Easy identification of each circuit**

94. What is the angle of throw for 4 cylinder engine?

- A) 90 Degree
- B) 60 Degree
- C) 120 Degree
- D) 180 Degree

**Answer: D) 180 Degree**

95. Which unit supplies a fine mist of oil in pneumatic system?

- A) Pressure relief valve
- B) Air service unit

- C) Actuator
- D) Control valve

**Answer: B) Air service unit**

96. Which law state that 'The current is directly proportional to the voltage and inversely proportional to the resistance'?

- A) Hook's Law
- B) Ohm's Law
- C) Boyle's Law
- D) Newton's Law

**Answer: B) Ohm's Law**

97. Which is used to determine the stroke of an engine?

- A) Length of connecting rod
- B) Dia of piston
- C) Throw
- D) Cycle

**Answer: C) Throw**

98. What is the ampere hour rating if battery deliver 5 ampere and period of 20 hours?

- A) 80 Ampere hour
- B) 90 Ampere hour
- C) 100 Ampere hour
- D) 110 Ampere hour

**Answer: C) 100 Ampere hour**

99. What is the specific gravity of fully charged battery?

- A) 1.170 - 1.200
- B) 1.240 - 1.250
- C) 1.260 - 1.280
- D) 1.210 - 1.230

**Answer: C) 1.260 - 1.280**

100. What is the use of ratchet stop in out side micro meter?

- A) Prevent sliding
- B) Prevent speed
- C) Prevent load
- D) Prevent excessive pressure

**Answer: D) Prevent excessive pressure**

101. Which causes the air enter into cylinder?

- A) AC fuel pump pressure
- B) Air filtering
- C) Engine vacuum
- D) Carburettor air-horn pressure

**Answer: C) Engine vacuum**

102. Which device is vaporizing of fuel and mixing it with air in petrol engine?

- A) Carburetor
- B) AC fuel pump
- C) Tank
- D) Fuel filter

**Answer: A) Carburetor**

103. What is the purpose of accelerating pump circuit?

- A) Provides extra fuel during pick up speed
- B) Provides mixture for idle speed
- C) Provides mixture for low speed
- D) Provides an economic mixture

**Answer: A) Provides extra fuel during pick up speed**

104. Which tool used to tighten the nuts and bolts at

recommended tightness?

- A) Adjustable wrench      B) Stud wrench  
C) Torque wrench          D) Pipe wrench

**Answer: C) Torque wrench**

**105.** How electrons move in a conductor?

- A) Conductance              B) Voltage difference  
C) Current                    D) Resistance

**Answer: B) Voltage difference**

**106.** How the hammers are specified?

- A) Size and shape            B) Metal and shape  
C) Metal and weight        D) Weight and shape

**Answer: D) Weight and shape**

**107.** What is the reason for fuse blown out in an electrical circuit?

- A) Parallel circuit            B) Open circuit  
C) Short circuit              D) Series circuit

**Answer: C) Short circuit**

**108.** Which is the compression pressure of C.I engine?

- A) 180 to 280 psi            B) 90 to 160 psi  
C) 290 to 390 psi            D) 400 to 550 psi

**Answer: D) 400 to 550 psi**

**109.** What is the working cycle of compression ignition engine?

- A) Rankin cycle              B) Diesel cycle  
C) Sterling cycle            D) Otto cycle

**Answer: B) Diesel cycle**

**110.** What is the name of beveled graduated sleeve of outside micro meter?

- A) Barrel                      B) Anvil  
C) Spindle                    D) Thimble

**Answer: D) Thimble**

**111.** Which year Hindustan motor established ambassador car industry in India?

- A) 1980                        B) 1900  
C) 1900                        D) 1940

**Answer: A) 1980**

**112.** What is the energy conversion of battery during discharge?

- A) Electrical energy into mechanical energy      B) Electrical energy into chemical energy  
C) Electrical energy into heat energy                    D) Chemical energy into electrical energy

**Answer: D) Chemical energy into electrical energy**

**113.** Why suction tube in the tank is raised above?

- A) To enter condensed water      B) To enter air  
C) To act atmospheric pressure      D) To avoid suction of water in fuel

**Answer: D) To avoid suction of water in fuel**

**114.** Which instrument is used to check the right angle?

- A) Spring Joint caliper            B) Try square  
C) Steel rule                        D) Firm joint caliper

**Answer: B) Try square**

**115.** Which component is used to measure the engine coolant temperature?

- A) Transistor                        B) Diode  
C) Thermistor                        D) Resistor

**Answer: C) Thermistor**

**116.** Which part of engine can be measured by dial gauge?

- A) Cylinder bore                    B) Crank pin  
C) Piston                              D) Gudgeon pin

**Answer: A) Cylinder bore**

**117.** Which of the following fuel quality determines burning property of diesel?

- A) Volatility                        B) Cetane number  
C) Viscosity                        D) Octane number

**Answer: B) Cetane number**

**118.** Which type of the circuit has an infinite resistance?

- A) Series closed circuit            B) Open circuit  
C) Short circuit                      D) Parallel closed circuit

**Answer: B) Open circuit**

**119.** What is the purpose of angle plate?

- A) Grinding                        B) Polishing  
C) Machining                        D) Marking

**Answer: D) Marking**

**120.** Which acid is used in the lead acid Battery?

- A) Hydro chloric acid            B) Nitric acid  
C) Hydro bromic acid            D) Sulphuric acid

**Answer: D) Sulphuric acid**

**121.** Which is the power source of pneumatic system?

- A) Air Service unit                B) Air Compressor  
C) Control valve                    D) Actuator

**Answer: B) Air Compressor**

**122.** How the amount of work done in a specification is called?

- A) Stroke length  
C) Torque

- B) Power  
D) Cycle

**Answer: B) Power**

**123.** What is heat?

- A) Torque  
C) Energy

- B) Velocity  
D) Force

**Answer: C) Energy**

**124.** What is the purpose of half round chisel?

- A) Squaring metal at corners  
C) Cut excess metal
- B) Cut curved grooves  
D) Cut keyways

**Answer: B) Cut curved grooves**

**125.** What is the working principle of dial test indicator?

- A) Leverage motion  
C) Spring motion
- B) Linear motion into rotary motion  
D) Linear motion into reciprocating motion

**Answer: B) Linear motion into rotary motion**

**126.** Which is the semi conductor materials?

- A) Arsenic and boron  
C) Aluminium and antimony
- B) Germanium and silicon  
D) Gallium and indium

**Answer: B) Germanium and silicon**

**127.** What is the material of negative plate in the lead acid Battery?

- A) Antimony  
C) Spongy lead
- B) Tin  
D) Lead peroxide

**Answer: C) Spongy lead**

**128.** How many crank shaft rotation required to open exhaust valve one time in four stroke engine?

- A) Three  
C) One
- B) Two  
D) Four

**Answer: B) Two**

**129.** What type of resistor is used in the vehicle flasher unit?

- A) Film resistor  
C) Integrated resistor
- B) Ballast resistor  
D) Printed resistor

**Answer: B) Ballast resistor**

**130.** What is the mechanical efficiency of an engine?

- A)  $(\text{BHP}/\text{FHP}) \times 100$   
C)  $(\text{FHP}/\text{BHP}) \times 100$
- B)  $(\text{BHP}/\text{IHP}) \times 100$   
D)  $(\text{IHP}/\text{BHP}) \times 100$

**Answer: B)  $(\text{BHP}/\text{IHP}) \times 100$**

**131.** What is flaring?

- A) Decreasing the diameter of a tube  
B) Increasing the diameter of a tube end

- C) Increasing the length of a tube  
D) Decreasing the length of a tube

**Answer: B) Increasing the diameter of a tube end**

**132.** Which instrument is used to check the continuity of the field coils of DC motor?

- A) Voltmeter  
C) Ohmmeter
- B) Ammeter  
D) Wattmeter

**Answer: C) Ohmmeter**

**133.** Which engine has fuel injection pump?

- A) Diesel engine  
C) Petrol engine
- B) CRDI engine  
D) MPFI engine

**Answer: A) Diesel engine**

**134.** Which is a temperature sensitive resistor?

- A) Diode  
C) Thyristor
- B) Transistor  
D) Thermistor

**Answer: D) Thermistor**

**135.** What is the compression ratio of an engine, its clearance volume is 10 c.c and swept volume is 90 c.c?

- A) 10:01  
C) 09:01
- B) 11:01  
D) 08:01

**Answer: A) 10:01**

**136.** Where is the air fuel mixture compressed in the two stroke petrol engine?

- A) Exhaust port  
C) Intake port
- B) Combustion chamber  
D) Transfer port

**Answer: B) Combustion chamber**

**137.** Which component of air brake system converts pneumatic into mechanical energy?

- A) Brake chamber  
C) Reservoir
- B) Brake valve  
D) Compressor

**Answer: A) Brake chamber**

**138.** How can identify a four stroke engine?

- A) Valves  
C) Passages
- B) Cavities  
D) Ports

**Answer: A) Valves**

**139.** What is the reason for pneumatic brake failure?

- A) Defective front wheel slack adjuster  
C) Less pedal play
- B) More pedal play  
D) Defective unloader valve

**Answer: D) Defective unloader valve**

**140.** Which cable is the thickest used in the automobile wiring?

- A) Horn cable                      B) Head light cable  
C) Wiper motor cable              D) Starter motor cable

**Answer: D) Starter motor cable**

**141.** What are the two instruments used to measure the warpage of the fly wheel?

- A) Steel rule, metal shim              B) Wooden plank, metal shim  
C) Knife, wooden blank              D) Straight edge, feeler gauge

**Answer: D) Straight edge, feeler gauge**

**142.** What is the material of positive plate in the lead acid Battery?

- A) Tin                                      B) Antimony  
C) Spongy lead                          D) Lead peroxide

**Answer: D) Lead peroxide**

**143.** How is the Battery capacity expressed?

- A) Voltage rating                      B) Ampere rating  
C) Ampere - hour rating              D) Voltage - hour rating

**Answer: C) Ampere - hour rating**

**144.** How many times, ports are open in two rotation of crank shaft in two stroke engine?

- A) Four times                              B) Two times  
C) One time                                D) Three times

**Answer: B) Two times**

**145.** Which measuring gauge needs to be set up to a fixed dimension before use?

- A) Dial bore gauge                      B) Depth gauge  
C) Vernier dial gauge                  D) Dial test indicator

**Answer: A) Dial bore gauge**

**146.** Which device transmit the pressure equally to all wheel cylinders in hydraulic brake?

- A) Servo cylinder                      B) Master cylinder  
C) Slave cylinder                        D) Booster cylinder

**Answer: B) Master cylinder**

**147.** Which is the starting system used in heavy vehicles?

- A) Electric motor cranking              B) Compressed air cranking  
C) Hand cranking                        D) Gasoline engine cranking

**Answer: A) Electric motor cranking**

**148.** What is the stroke length of the engine if its throw of the crankshaft is 40 mm?

- A) 60 mm                                  B) 20 mm  
C) 80 mm                                  D) 40 mm

**Answer: C) 80 mm**

**149.** Which screw driver is used in blind space?

- A) Philips screw driver                  B) Ratchet screw driver  
C) Offset screw driver                    D) Stumpy screw driver

**Answer: C) Offset screw driver**

**150.** Which metal tube is used for single thickness flare?

- A) Aluminium                              B) Bronze  
C) Brass                                      D) Copper

**Answer: D) Copper**

**151.** Which instrument used to check the piston ring end gap?

- A) Vernier gauge                          B) Feeler gauge  
C) Pitch gauge                              D) Telescopic gauge

**Answer: B) Feeler gauge**

**152.** Which device converts hydraulic energy into mechanical energy?

- A) Actuator                                  B) Control Valve  
C) Regulator                                D) Compressor

**Answer: A) Actuator**

**153.** Which ministry of India regulate the motor vehicle activity?

- A) Minister of finance                      B) Minister of defence  
C) Minister of rural and development      D) Minister of road transport and highways

**Answer: D) Minister of road transport and highways**

**154.** Which equipment used for quick inspection under chassis of a car?

- A) Trolley jack                              B) Stand  
C) Two post hoist                          D) Screw jack

**Answer: A) Trolley jack**

**155.** A cycle consisting of one constant pressure, one constant volume and two isentropic processes is known as

- A) Isothermal                                B) Constant volume  
C) Diesel Cycle                              D) Constant pressure

**Answer: C) Diesel Cycle**

**156.** How the number of positive and negative plates are compared in a lead acid Battery?

- A) Positive plate is equal to the negative plate      B) Negative plate is one less than positive plate  
C) Negative plate is one more than positive plates      D) Positive plates is one more than negative plates

**Answer: C) Negative plate is one more than positive plates**