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Score: 92/156 (58.97%)

Code: 2365

1. How electrons move in a conductor?

- A) Current  
B) Resistance  
C) Conductance (Incorrect)  
D) **Voltage difference**

2. Which is the Ohm's Mathematical Expression?

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

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

- A) **Ballast resistor (Correct)**  
B) Film resistor  
C) Printed resistor  
D) Integrated resistor

4. Which material is required to make integrated circuit chips?

- A) zinc  
B) steel  
C) **silicon (Correct)**  
D) copper

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

- A) Inductor  
B) Resistor  
C) Capacitor  
D) **Transistor (Correct)**

6. Which is a temperature sensitive resistor?

- A) Diode  
B) Thyristor  
C) **Thermistor (Correct)**  
D) Transistor

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

- A) **Thermistor (Correct)**  
B) Resistor  
C) Transistor  
D) Diode

8. What is the permissible voltage drop in the electrical circuit?

- A) 0.1 V  
B) **0.2 V (Correct)**  
C) 0.3 V  
D) 0.4 V

9. How many cells are in the 12V Battery?

- A) 2 cells  
B) **6 cells (Correct)**  
C) 9 cells  
D) 12 cells

10. What is the material of positive plate in the lead acid

Battery?

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

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

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

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

- A) Grey (Incorrect)  
B) **Brown**  
C) White  
D) Black

13. How the lead acid Battery is classified?

- A) Dry cell  
B) **Secondary cell**  
C) Alkaline cell  
D) Primary cell (Incorrect)

14. How is the Battery capacity expressed?

- A) **Ampere - hour rating**  
B) Voltage - hour rating  
C) Ampere rating  
D) Voltage rating (Incorrect)

15. Which instrument is used to measure the electrical resistance?

- A) Ammeter  
B) Voltmeter  
C) **Ohmmeter (Correct)**  
D) Wattmeter

16. Which instrument is prohibited to connect with live wire?

- A) Ammeter (Incorrect)  
B) Voltmeter  
C) **Ohmmeter**  
D) Wattmeter

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

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

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

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

19. Which device has the ability to store electrical charge?

**A) Capacitor (Correct)**

C) Insulator

B) Resistor

D) Conductor

A) 1.260 - 1.280

**C) 1.200 - 1.230**

B) 1.230 - 1.260

D) 1.170 - 1.200 (Incorrect)

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

**A) Ignition coil (Correct)**

C) Condenser

B) Spark plug

D) High Tension Cable

21. What is the energy conversion of battery during discharge?

A) Electrical energy into heat energy

C) Electrical energy into chemical energy

**B) Chemical energy into electrical energy**

D) Electrical energy into mechanical energy (Incorrect)

22. What is the energy conversion of battery during charging?

**A) Electrical energy into chemical energy**

C) Chemical energy into electrical energy

B) Electrical energy into heat energy (Incorrect)

D) Electrical energy into mechanical energy

23. Which shell electrons has least energy?

**A) K shell electron (Correct)**

C) M shell electron

B) L shell electron

D) N shell electron

24. Which is the semi conductor materials?

A) Arsenic and boron

**C) Germanium and silicon (Correct)**

B) Gallium and indium

D) Aluminium and antimony

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

A) Two electrons in the outer most orbit (Incorrect)

**C) Four electrons in the outer most orbit**

B) Three electrons in the outer most orbit

D) Five electrons in the outer most orbit

26. Which cable is the thickest used in the automobile wiring?

A) Horn cable

**C) Starter motor cable (Correct)**

B) Head light cable

D) Wiper motor cable

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

A) 1.170 - 1.200

C) 1.240 - 1.250

B) 1.210 - 1.230

**D) 1.260 - 1.280 (Correct)**

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

29. What type of emf is produced if the conductor moved and cut the magnetic field?

**A) Dynamically induced emf (Correct)**

C) Electro-chemical induced emf

B) Statistically induced emf

D) Electro-magnetic induced emf

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

A) Positive plate is equal to the negative plate (Incorrect)

C) Negative plate is one less than positive plate

**B) Negative plate is one more than positive plates**

D) Positive plates is one more than negative plates

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

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

- A) Ammeter  
B) Voltmeter  
**C) Ohmmeter**  
D) Wattmeter (Incorrect)

38. Which type of the circuit has an infinite resistance?

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

39. Which type of the circuit leads to hazard effect?

- A) Open circuit  
B) Series circuit  
**C) Short circuit**  
D) Parallel circuit (Incorrect)

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

- A)  $R = R1 + R2$  (Correct)**  
B)  $R = R1 \times R2$   
C)  $R = R1 \times R2$   
D)  $R = R1/R2$

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

- A) Open circuit (Incorrect)  
B) **Short circuit**  
C) Series circuit  
D) Parallel circuit

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

- A) 1810  
B) **1887**  
C) 1910 (Incorrect)  
D) 1950

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

- A) 1900  
B) 1900  
C) 1940  
D) **1980 (Correct)**

44. Which type of brake used in heavy vehicle parking?

- A) Hydraulic  
B) **Mechanical (Correct)**  
C) Electrical brake  
D) Pneumatic brake

45. 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 (Correct)**

46. Which service equipment is used to lift a car?

- A) Arbor press  
B) Hydraulic valve  
**C) Hydraulic hoist (Correct)**  
D) Hydraulic press

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

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

48. Where the emulsion tube is provided in solex carburetor?

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

49. What is the specification of 6J x 15?

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

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

- A) 2 digit  
B) 3 digit  
C) 5 digit  
D) **8 digit (Correct)**

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

- A) Torque  
B) **Power**  
C) Stroke length (Incorrect)  
D) Cycle

52. Which engine has more length?

- A) Opposed engine**  
B) 'V' engine  
C) Inline engine (Incorrect)  
D) Radial engine

53. Which is the engine having cylinders in 180 Degree?

- A) Inline engine  
B) V- engine  
**C) Opposed engine (Correct)**  
D) Radial engine

54. How can identify a four stroke engine?

- A) Valves**  
B) Ports  
C) Cavities (Incorrect)  
D) Passages

55. What is the working cycle of compression ignition engine?

- A) Diesel cycle (Correct)**  
B) Otto cycle  
C) Sterling cycle  
D) Rankin cycle

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

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

57. How many crank shaft rotation required to open exhaust valve one time in four stoke engine?

- A) One  
B) **Two (Correct)**  
C) Three  
D) Four

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

- A) Swept volume
- C) Total volume

- B) Clearance volume (Correct)**
- D) Displace volume

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

- A) One time
- C) Three times

- B) Two times (Correct)**
- D) Four times

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

- A) Intake port (Incorrect)
- C) Transfer port

- B) Exhaust port
- D) Combustion chamber**

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

- A) One
- C) Three

- B) Two (Correct)**
- D) Four

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

- A) 60 Degree
- C) 120 Degree

- B) 90 Degree
- D) 180 Degree (Correct)**

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

- A) Cycle
- C) Dia of piston

- B) Throw**
- D) Length of connecting rod (Incorrect)

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

- A) Cycle**
- C) Stroke

- B) Stroke
- D) Efficiency (Incorrect)

65. Which is the compression pressure of C.I engine?

- A) 90 to 160 psi
- C) 290 to 390 psi

- B) 180 to 280 psi
- D) 400 to 550 psi (Correct)**

66. Which is the engine called as constant volume cycle?

- A) S.I engine**
- C) Turbine engine (Incorrect)

- B) C.I engine
- D) Steam engine

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

- A) Constant volume
- C) Diesel Cycle (Correct)**

- B) Constant pressure
- D) Isothermal

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

- A) Constant volume
- C) Diesel Cycle**

- B) Constant pressure (Incorrect)
- D) Isothermal

69. How can identify a two stroke engine?

- A) Valves (Incorrect)
- C) Cavities

- B) Ports**
- D) Passages

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

- A) 08:01
- C) 10:01 (Correct)**

- B) 09:01
- D) 11:01

71. Which is the power developed in an engine?

- A) BHP
- C) IHP (Incorrect)

- B) IHP**
- D) RHP

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

- A) 20 mm
- C) 60 mm

79. Why suction tube in the tank is raised above?

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

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

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

81. Which causes the air enter into cylinder?

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

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

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

83. What is the purpose of needle valve in carburetor?

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

84. What is the purpose of throttle valve in the carburetor?

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

85. What is the purpose of accelerating pump circuit?

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

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

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

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

- A) Volatility
- B) Viscosity

C) Cetane number

**D) Octane number (Correct)**

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

- A) Volatility
- B) Viscosity
- C) Cetane number (Correct)**
- D) Octane number

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

- A) Volatility (Correct)**
- B) Viscosity
- C) Cetane number
- D) Octane number

90. Which of the following fuel quality determines fuel to flow?

- A) Volatility
- B) Viscosity (Correct)**
- C) Cetane number
- D) Octane number

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

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

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

- A) 4
- B) 5 (Incorrect)
- C) 6
- D) 7**

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

- A) One**
- B) Two (Incorrect)
- C) Three
- D) Four

94. What is heat?

- A) Torque
- B) Force
- C) Energy (Correct)**
- D) Velocity

95. What is indicated horse power?

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

96. What is brake horse power?

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

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

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

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

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

99. Which spanner used for zero setting in outside micrometer?

- A) **Hooks spanner (Correct)**  
C) Double end spanner  
B) Ring spanner  
D) Adjustable spanner

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

- A) Wire gauge  
C) Vacuum gauge  
B) Feeler gauge  
D) **Pressure gauge (Correct)**

101. What is the smallest reading of vernier caliper?

- A) Deviation  
C) **Least count (Correct)**  
B) Tolerance  
D) Allowance

102. Which one is the indirect measuring instrument?

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

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

- A) Anvil  
C) Spindle  
B) Barrel  
D) **Thimble (Correct)**

104. What is flaring?

- A) **Increasing the diameter of a tube end**  
C) Increasing the length of a tube (Incorrect)  
B) Decreasing the diameter of a tube  
D) Decreasing the length of a tube

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

- A) **Flat nose plier**  
C) Slip joint plier  
B) Round nose plier (Incorrect)  
D) Internal circlip plier

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

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

107. Which tool used to tighten the nuts and bolts at recommended tightness?

- A) Stud wrench  
C) **Torque wrench (Correct)**  
B) Pipe wrench  
D) Adjustable wrench

108. What is the use of ball pein hammer head?

- A) Strike soft metal  
C) Stamp the specifications  
B) Strike the metal  
D) **Spread the metal in all direction (Correct)**

109. Which metal tube is used for single thickness flare?

- A) Brass  
C) Aluminium  
B) Bronze  
D) **Copper (Correct)**

110. How the hammers are specified?

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

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

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

112. Which instrument is used to check the right angle?

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

113. Which is used for marking and setting of work?

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

114. What is the purpose of angle plate?

- A) Machining  
C) Polishing  
B) **Marking**  
D) Grinding (Incorrect)

115. What is the purpose of half round chisel?

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

116. Which screw driver is used in blind space?



A) Gear pump (Incorrect)  
C) Vane pump

**B) Plunger pump**  
D) Internal gear pump

138. Which device converts mechanical energy into pneumatic energy?

A) Actuator (Incorrect)  
C) Alternator

B) Generator  
**D) Compressor**

139. Which device converts hydraulic energy into mechanical energy?

**A) Actuator (Correct)**  
C) Compressor

B) Regulator  
D) Control Valve

140. Which valve safe guards the hydraulics jack?

**A) Relief valve (Correct)**  
C) Non return valve 1

B) Shut off valve  
D) Non return valve 2

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

A) Slave cylinder  
**C) Master cylinder (Correct)**

B) Servo cylinder  
D) Booster cylinder

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

A) Reservoir  
C) Compressor

B) Brake valve  
**D) Brake chamber (Correct)**

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

**A) Air service unit**  
C) Valve unit

B) Compressor unit  
D) Actuator unit (Incorrect)

144. Which part operates the brake shoe in the hydraulic brake system?

A) Break drum (Incorrect)  
**C) Wheel cylinder**

B) Break pedal  
D) Master cylinder

145. Which is the power source of pneumatic system?

A) Actuator  
**C) Air Compressor (Correct)**

B) Control value  
D) Air Service unit

146. What is the working media in pneumatic system?

**A) Air (Correct)**  
C) Diesel

B) Oil  
D) Stream

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

A) Housing  
C) Driven gear (Incorrect)

B) Drive gear  
**D) Gear meshing**

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

A) By pass (Incorrect)  
C) Non return

**B) Delivery**  
D) Pressure relief

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

A) Gears  
C) Sealing ring

B) Gasket (Incorrect)  
**D) Crescent-shaped spacer**

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

A) Same direction  
**C) Opposite direction (Correct)**

B) Inclined direction  
D) Perpendicular direction

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

A) Actuator (Incorrect)  
**C) Air service unit**

B) Control valve  
D) Pressure relief valve

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

**A) Spur gear**  
C) Rotor gear (Incorrect)

B) Spiral gear  
D) Helical gear

153. What is the reason for pneumatic brake failure?

A) Less pedal play  
**C) Defective unloader valve (Correct)**

B) More pedal play  
D) Defective front wheel slack