

Railway Recruitment Cell

Post Name : Mechanic Motor Vehicle

Exam Code : MASSXAEC

Exam Date : 21-06-2024

Exam Time : 11:15AM

Question No. 1

The AC current of alternator will be converted to DC by using-

- A) Condenser
- B) Rectifier
- C) Brushes
- D) Induction coil

Answer Key: B

Question No. 2

Ammeter measures the-

- A) Voltage
- B) Power
- C) Current
- D) Resistance

Answer Key: C

Question No. 3

The Phillips screwdriver-

- A) Is not self-centering
- B) Has pointed edges in the shape of a cross
- C) Is available in one size only
- D) All of the options

Answer Key: B

Question No. 4

Which allows users to control the rotating force applied so it can match the specifications of the job?

- A) Pipe wrench
- B) Chain wrench
- C) Torque wrench
- D) Ratchet wrench

Answer Key: C

Question No. 5

In which order do the following occur in a 4-stroke petrol engine?

- P) Compression
 - Q) Exhaust
 - R) Suction
 - S) Power
- A) RSPQ
 - B) RPQS
 - C) RQSP
 - D) RPSQ

Answer Key: D

Question No. 6

Clean diesel technology aims at reducing-

A) Diesel engine emissions

B) Usage of diesel vehicles

C) Supply of diesel

D) Usage of petrol vehicles

Answer Key: A

Question No. 7

Baffles in a fuel tank are provided to-

A) Create vibration

B) Indicate fuel level

C) Reduce surges and splashes

D) Increase the cetane number

Answer Key: C

Question No. 8

Identify the IC engine among the following.

A) Steam Engine only

B) Petrol engine only

C) Diesel engine only

D) Both petrol engine and diesel engine

Answer Key: D

Question No. 9

A planetary gear set is made up of-

A) Sun gear and planet gears only

B) Planet gears only

C) Sun gear and ring gear only

D) Sun gear, planet gears and ring gear

Answer Key: D

Question No. 10

The type of CVT which utilizes discs and power rollers is known as-

A) Pulley-based CVT

B) Toroidal CVT

C) Hydrostatic CVT

D) Pull-type CVT

Answer Key: B

Question No. 11

A worm gear is an essential part of the-

A) Rack-and-pinion steering system

B) None of the options

C) Recirculating-ball steering system

D) Steer-by-wire steering system

Answer Key: C

Question No. 12

The type of tyre which does NOT enclose a tube but where high pressure air is filled in the tyre itself is known as the-

A) Tubed tyre

B) Tubeless tyre

C) Solid tyre

D) Steel tyre

Answer Key: B

Question No. 13

What type of brake is said to be used when a vehicle is slowed down by stepping off the accelerator and downshifting gears, instead of pressing on the brake pedal?

- A) Parking brake
- B) Electric brake
- C) Engine brake
- D) Regenerative brake

Answer Key: C

Question No. 14

A _____ is typically one which enables the vehicle's electric motor to act as a generator.

- A) Parking brake
- B) Disc brake
- C) Engine brake
- D) Regenerative brake

Answer Key: D

Question No. 15

What is the other name of the Port Injection System?

- A) Throttle Body Injection
- B) Multi-Point Fuel Injection
- C) Single-Point Fuel Injection
- D) None of the options

Answer Key: B

Question No. 16

The heat exchanger coil that collects heat from the surrounding, through a refrigerant which turns to gas, is known as the-

- A) Evaporator
- B) Compressor
- C) Condenser
- D) Expansion valve

Answer Key: A

Question No. 17

For a rigid-axle leaf-spring suspension system, which of the following is CORRECT?

- A) Uses coil springs only
- B) Can be used in both dead and live axles
- C) Cannot be used in dead axles
- D) Cannot be used in live axles

Answer Key: B

Question No. 18

A short long arm suspension (SLA) is also known as-

- A) An unequal length double wishbone suspension
- B) MacPherson Strut suspension
- C) Solid Axle Dependent Suspension
- D) Air suspension

Answer Key: A

Question No. 19

The number after the "W" in a SAE motor oil grade indicates-

- A) Oil's viscosity grade at low temperatures
- B) Oil's weight at low temperatures
- C) Oil's weight at hot temperatures
- D) Oil's viscosity grade at high temperatures

Answer Key: D

Question No. 20

The exhaust gas pressure that is developed by an engine to overcome the hydraulic resistance of the exhaust system so as to discharge the exhaust gases into the atmosphere is known as-

- A) Engine suction gas pressure
- B) Engine stroke gas pressure
- C) Engine exhaust back pressure
- D) Engine valve gas pressure

Answer Key: C

Question No. 21

Identify which is TRUE about diesel engines.

- A) A carburetor is essential
- B) A fuel injector is usually provided
- C) The air-fuel mixture is taken in during the suction stroke
- D) All of the options

Answer Key: B

Question No. 22

Find the INCORRECT match.

- A) Petrol-Highly volatile
- B) Diesel engine-Spark ignition
- C) Petrol engine-Carburetor
- D) Diesel engine-Fuel injector

Answer Key: B

Question No. 23

What is a refrigerant?

- A) Another name for a fridge
- B) Substance used to transfer heat from one area to another
- C) Another name for a condenser
- D) Another name for a compressor

Answer Key: B

Question No. 24

In a refrigeration cycle, the device that creates a drop in pressure after the refrigerant leaves the condenser is known as the-

- A) Condenser
- B) Compressor
- C) Expansion valve
- D) None of the options

Answer Key: C

Question No. 25

In an automobile air-conditioning system, the ambient air temperature sensor is used to-

- A) Measure temperature inside the passenger compartment
- B) Measure temperature outside the passenger compartment
- C) Measure temperature at the evaporator core
- D) None of the options

Answer Key: B

Question No. 26

If the system has a single injector positioned just above the throttle valves in the throttle body, it is known as-

- A) Throttle Body Injection
- B) Multi-Point Fuel Injection
- C) Port Injection System
- D) None of the options

Answer Key: A

Question No. 27

The orifice tube of a vehicle's A/C system has _____ moving parts.

- A) 2
- B) 3
- C) 4
- D) Zero

Answer Key: D

Question No. 28

What is the expansion of 'TDC' with respect to an engine?

- A) Try Default Centre
- B) Top Dead Centre
- C) Top Die Casting
- D) Tyre Default Compression

Answer Key: B

Question No. 29

What is the full form of CRDI pertaining to diesel engines?

- A) Common Rail Direct Injection
- B) Corner Rail Direct Injection
- C) Common Re-Direct Injection
- D) Corner Rail Direct Infusion

Answer Key: A

Question No. 30

Two semicircular parts (together resembling a circle) on which brake linings are fixed to directly contact the drum, are known as-

- A) Return springs
- B) Wheel cylinders
- C) Brake shoes
- D) Backing plates

Answer Key: C

Question No. 31

In a disc brake, the discs which slow the car using friction from the pads are also known as-

- A) Pads
- B) Rotors
- C) Calipers
- D) Caliper pin boots

Answer Key: B

Question No. 32

Find the INCORRECT pair.

- A) Class B fire—Petrol
- B) Class C fire—Paper

C) Class D fire—Aluminium

D) Class A fire—Wood

Answer Key: B

Question No. 33

The hand tool used to hold objects firmly, bend other materials, and remove unwanted elements is known as the-

A) Pliers

B) File

C) Try-square

D) None of the options

Answer Key: A

Question No. 34

A kind of hammer, often made of rubber or wood usually having a relatively large head is known as-

A) Pliers

B) File

C) Try Square

D) Mallet

Answer Key: D

Question No. 35

A gauge which measures pressure below the atmospheric pressure (sub-atmospheric pressure) is known as-

A) Feeler gauge

B) Thread pitch gauge

C) Telescopic gauge

D) Vacuum gauge

Answer Key: D

Question No. 36

Generally, air bags are designed to-

A) Never deflate

B) Deflate as the head presses against it

C) Deflate when rescue teams arrive

D) Deflate only if the driver presses a button

Answer Key: B

Question No. 37

Which punch, instead of being pointed in shape, is parallel and used for driving out and removing rivets and pins out of a hole?

A) Prick punch

B) Centre punch

C) Pin punch

D) None of the options

Answer Key: C

Question No. 38

Which of the following describes heat getting converted directly into electricity or electrical energy transforming directly into thermal power?

A) Thermo-electric energy

B) Electrochemical energy

C) Photo-voltaic energy

D) Piezo-electric energy

Answer Key: A

Question No. 39

Answer Key: B

Question No. 46

The ability of a material to withstand shock loading without fracture is called-

- A) Tensile strength
- B) Ductility
- C) Hardness
- D) Toughness

Answer Key: D

Question No. 47

Which of the following has only magnitude and does NOT include direction?

- A) Speed
- B) Velocity
- C) Acceleration
- D) All of the options

Answer Key: A

Question No. 48

"Power" can be described as-

- A) Energy
- B) Energy divided by time
- C) Force divided by time
- D) Distance divided by time

Answer Key: B

Question No. 49

The power generated in the engine cylinder and received by the piston (before deduction of frictional losses) is called-

- A) Indicated horse power
- B) Brake horse power
- C) Drawbar horse power
- D) Frictional horse power

Answer Key: A

Question No. 50

If an object moves faster than before, its kinetic energy will now-

- A) Increase
- B) Decrease
- C) Remain the same
- D) None of the options

Answer Key: A

Question No. 51

Gauge pressure is _____ for pressures above atmospheric pressure, and _____ for pressures below it.

- A) Positive, positive
- B) Negative, negative
- C) Positive, negative
- D) Negative, positive

Answer Key: C

Question No. 52

The number of square faces in a regular cube (solid) is-

A) 4

B) 8

C) 3

D) 6

Answer Key: D

Question No. 53

An A0 size drawing sheet is larger than-

A) A1

B) A2

C) A3

D) All of the options

Answer Key: D

Question No. 54

The size of the A2 drawing sheet is-

A) 420 x 594 mm

B) 297 x 420 mm

C) 594 x 841 mm

D) 841 x 1189 mm

Answer Key: A

Question No. 55

If the top view of an object is located above its front view in the drawing, then it is the _____ angle projection.

A) First

B) Sixth

C) Third

D) Ninth

Answer Key: C

Question No. 56

The unit of length is foot in-

A) F.P.S.

B) C.G.S.

C) M.K.S.

D) All of the options

Answer Key: A

Question No. 57

The M.K.S. system of units is the short form of-

A) Metric kind system

B) Metric King's system

C) Metre-Kilogram-Second

D) Maintained King's system

Answer Key: C

Question No. 58

The property of a material to be stretched, pulled, or drawn into a thin wire without breaking is called-

A) Hardness

B) Softness

C) Ductility

D) Compressive strength

Answer Key: C

Question No. 59

The ability of a metal to be hammered into a sheet is generally called-

- A) Malleability
- B) Hardness
- C) Ultimate strength
- D) Elasticity

Answer Key: A

Question No. 60

The velocity of an object can be described as its-

- A) Acceleration along with its direction
- B) Speed along with its direction
- C) Retardation
- D) None of the options

Answer Key: B

Question No. 61

The unit of "energy" is-

- A) Newton
- B) Pascal
- C) Joule
- D) Watt

Answer Key: C

Question No. 62

The horsepower available on the crankshaft and measured by a suitable dynamometer is called-

- A) Indicated horsepower
- B) Brake horsepower
- C) Frictional horsepower
- D) All of the options

Answer Key: B

Question No. 63

If an object is relocated to a higher position, then its potential energy will now-

- A) Increase
- B) Decrease
- C) Remain the same
- D) None of the options

Answer Key: A

Question No. 64

Which component is used to reduce a wide range of noise from the exhaust gases?

- A) Supercharger
- B) Muffler
- C) Intake manifold
- D) Exhaust manifold

Answer Key: B

Question No. 65

Which of the following devices connects and disconnects the transmission system from the engine?

- A) Brake
- B) Differential
- C) Clutch
- D) Gear

Answer Key: C

Question No. 66

In diesel cycle, combustion takes place at-

- A) Constant pressure
- B) Constant volume
- C) Constant temperature
- D) Constant temperature and pressure

Answer Key: A

Question No. 67

A drilling machine, operated by holding in a hand and used to drill small sized holes is known as-

- A) Bench mounting sensitive drilling machine
- B) Multi spindle drilling machine
- C) Radial drilling machine
- D) Portable drilling machine

Answer Key: D

Question No. 68

A machining process employed to increase surface finish of the workpiece using loose abrasive particles is known as-

- A) Boring
- B) Reaming
- C) Lapping
- D) Milling

Answer Key: C

Question No. 69

A direction control valve having 2 positions and 3 ports is commonly known as a-

- A) 5/2 way valve
- B) 2/5 way valve
- C) 3/2 way valve
- D) 2/3 way valve

Answer Key: C

Question No. 70

The piston ring located closest to the crankcase, used to wipe excess oil from the cylinder wall is known as-

- A) Compression ring
- B) Oil ring
- C) Wiper ring
- D) All of the options

Answer Key: B

Question No. 71

The temperature at which wax crystals start to form in the fuel is known as the-

- A) Pour point
- B) Cloud point
- C) Flash point
- D) Fire point

Answer Key: B

Question No. 72

The essential component of the starting system is the-

- A) Battery
- B) Wheels

C) Steering wheel

D) All of the options

Answer Key: A

Question No. 73

A 4-stroke engine completes its cycle of operation in four strokes or _____ of the crankshaft.

A) One revolution

B) Two revolutions

C) Three revolutions

D) Four revolutions

Answer Key: B

Question No. 74

In a starter motor system, the electromagnet (a laminated soft iron core which is wrapped with numerous conductors loops or windings) mounted on the drive shaft and bearings for support, is known as-

A) Commutator

B) Armature

C) Solenoid

D) Lever Fork

Answer Key: B

Question No. 75

Silicon Controlled Rectifiers (SCRs) are commonly known as-

A) Thyristors

B) Transistors

C) MOSFETs

D) Uni-junction transistors

Answer Key: A