FINAL ANSWER KEY

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Question1:-A Vernier caliper with least count 0.02 mm. If the main scale reading is 24 mm and the 18^{th} vernier scale division coincides with a main scale division. What is the measured dimension ?

A:-24.36 mm

B:-24.20 mm

C:-24.42 mm

D:-24.89 mm

Correct Answer:- Option-A

Question2:-Which gas is commonly used in CO_2 Fire Extinguisher ?

A:-Nitrogen

B:-Oxygen

C:-Carbon di-oxide

D:-Hydrogen

Correct Answer:- Option-C

Question3:-While using die _____ is used to hold it.

A:-Tap wrench

B:-Die stock

C:-Spanner

D:-Pliers

Correct Answer:- Option-B

Question4:-Which part connects the two handles on a combination plier ?

A:-Pivot

B:-Jaw

C:-Cutting edge

D:-Tip

Correct Answer:- Option-A

Question5:-The tip angle of centre punch is _____

A:-30°

B:-45°

C:-60°

D:-90°

Correct Answer:- Option-D

Question6:-Which chisel is also known as cape chisel ?

A:-Flat chisel

B:-Cross cut chisel

C:-Half round chisel

D:-Diamond point chisel

Correct Answer:- Option-B

Question7:-The vice used for holding cylindrical objects is _____.

A:-Bench vice

B:-Hand vice

C:-Pipe vice

D:-Machine vice

Correct Answer:- Option-C

Question8:-Which tool is used for tightening nuts/bolts in a specified force ?

A:-Pipe wrench

B:-Adjustable wrench

C:-Vice grip plier

D:-Torque wrench

Correct Answer:- Option-D

Question9:-The Vehicle 'Maruti Omni' belongs to which category on the basis of Engine Position ?

A:-Rear transverse engine

B:-Front transverse engine

C:-Front longitudinal engine

D:-Rear longitudinal engine

Correct Answer:- Option-C

Question10:-Which of the following statement is correct for Jacks ?

A:-Lift an engine from car

B:-Jack is provided with rachet teeth and ratchet handle

C:-Always apply jack against suspension parts

D:-Commonly operated hydraulically or mechanically

Correct Answer:- Option-D

Question11:-What is the role of ARAI in Indian Automotive industry ?

A:-Provide service to design and development of Indian Automotive industry

B:-Deal with development of National Highways

C:-Plan specification for roads and bridges

D:-Administration of Motor Vehicle Act in India

Correct Answer:- Option-A

Question12:-Identify the vehicle from the features mentioned ''vehicle consist of a tractor and a semitrailer connected by means of a fifth wheel coupling'' ?

A:-Coach

B:-Articulated vehicle

C:-Convertible

D:-Invalid carriage

Correct Answer:- Option-B

Question13:-What is mean by clearance volume ?

A:-Same volume as swept volume

B:-Volume travelled by piston from TDC to BDC

C:-Volume of cylinder below piston when piston at BDC

D:-Volume of cylinder above piston when piston at TDC

Correct Answer:- Option-D

Question14:-Which is correct for CI engines ?

A:-Emission contains oxides of nitrogen

B:-Emission not contains particulate matter

C:-Compression ratio is generally upto 8 : 1

D:-Compression pressure is upto 100 PSI

Correct Answer:- Option-A

Question15:-Which is true for a Tachometer ?

A:-Used to indicate distance travelled by a vehicle

B:-Used to indicate glow plug state

C:-Also called RPM meter

D:-Used to indicate oil pressure in engine

Correct Answer:- Option-C

Question16:-What is mean by Crank Throw ?

A:-Diameter of Crank Pin

B:-Diameter of Main Journal

C:-Distance between adjacent Crank Pins

D:-Distance between centres of Crank Pin and Main Journal

Correct Answer:- Option-D

Question17:-What is the function of camshaft ?

A:-Operate crank shaft through timing gear

B:-To drive the fly wheel

C:-Operate distributor in petrol engines

D:-Operate thermostat

Correct Answer:- Option-C

Question18:-Which is not a part of piston ?

A:-Piston skirt

B:-Piston pin boss

C:-Piston ring

D:-Piston crown

Correct Answer:- Option-C

Question19:-Which statement is not correct for air cleaners ?

A:-It reduces the noise of intake gas

B:-It acts as a flame arrester during engine back fire

C:-Dry type air cleaner contains oil

D:-Mounted on top of intake manifold

Correct Answer:- Option-C

Question20:-Which type of muffler is suitable for virtually silent exhaust without generating unwanted back pressure ?

A:-Baffle type mufflers

B:-Electronic mufflers

C:-Reverse flow mufflers

D:-Straight through mufflers

Correct Answer:- Option-B

Question21:-Which type of bearing is fitted in the connecting rod big end ?

A:-Needle bearing

B:-Shell bearing

C:-Ball bearing

D:-Taper roller bearing

Correct Answer:- Option-B

Question22:-Which material is used in cylinder block ?

A:-Zinc alloy

B:-Brass

C:-Cast iron

D:-Bronze

Correct Answer:- Option-C

Question23:-Which part connects the piston with crankpin ?

A:-Crank shaft

B:-Camshaft

C:-Pushrod

D:-Connecting rod

Correct Answer:- Option-D

Question24:-What is the purpose of flywheel timing mark ?

A:-To set the valve clearance

B:-To set the FIP timing

C:-To set engine timing

D:-To coincide the gears

Correct Answer:- Option-C

Question25:-Which engine is used the petrol oil lubrication system ?

A:-Steam engine

B:-Four stroke engine

C:-Two stroke engine

D:-All of the above

Correct Answer:- Option-C

Question26:-Where are the metal fins located in an air cooled engine ?

A:-Exhaust pipe

B:-Cylinder and head

C:-Intake manifod

D:-Crank case

Correct Answer:- Option-B

Question27:-Which mixture is used in the radiator reverse flushing process ?

A:-Water with coolent

B:-Water with air pressure

C:-Water with soap oil

D:-Water with engine oil

Correct Answer:- Option-B

Question28:-How many valves are used in radiator pressure cap ?

A:-1

B:-3

C:-2

D:-4

Correct Answer:- Option-C

Question29:-How oil deliver from the crank shaft main bearings to connecting rod bearings ?

A:-Through crank pulley

B:-Through drilled oil passages

C:-Through sprocket

D:-Through crank web

Correct Answer:- Option-B

Question30:-Which lubrication system has separate oil tank ?

A:-Wet sump lubrication

B:-Dry sump lubrication

C:-Splash lubrication

D:-Petrol oil lubrication

Correct Answer:- Option-B

Question31:-Which part helps to increase the boiling point water in water cooling system ?

A:-Radiator core

B:-Radiator fins

C:-Radiator cap

D:-Thermostat valve

Correct Answer:- Option-C

Question32:-What is the use of dip stick in an engine ?

A:-To check the oil pressure

B:-To check the oil temperature

C:-To check the oil level

D:-To check the oil density

Correct Answer:- Option-C

Question33:-In electronic fuel injection the aim of Pilot injection is _____.

A:-Increasing power

B:-Reducing emission

C:-Smoothing combustion

D:-Increasing mileage

Correct Answer:- Option-C

Question34:-Which type of material is used in secondary filter of two stage filtration system of diesel ?

A:-Cloth

B:-Paper

C:-Nylon mesh

D:-Wire mesh

Correct Answer:- Option-B

Question35:-During idling of fuel feed pump which of the following statements are correct ?
i. Plunger compress the return spring
ii. Suction valve will be closed
iii. Delivery valve will be closed

A:-Only ii and iii

B:-Only i and iii

C:-All of the above

D:-Only i and ii

Correct Answer:- Option-D

Question36:-How many pumping elements are there in a distributor type fuel injection pump ?

A:-Only one

B:-Two

C:-As per the cylinders

D:-Four

Correct Answer:- Option-A

Question37:-The fuel pipe connecting fuel injection pump and injector is called

A:-Low pressure pipe

B:-High pressure pipe

C:-Suction pipe

D:-Return pipe

Correct Answer:- Option-B

Question38:-Venturi unit is a part of _____ Governor.

A:-Mechanical

B:-Hydraulic

C:-Pneumatic

D:-Servo

Correct Answer:- Option-C

Question39:-What is meant by DEF in Selective Catalytic Reduction (SCR) ?

A:-Diesel Emission Fluid

B:-Diesel Exhaust Fluid

C:-Diesel Engine Filter

D:-Diesel Emission Filter

Correct Answer:- Option-B

Question40:-Which are the essential sensors required for engine starting ?

A:-IAT, ECT and MAP

B:-TP, MAP and O_2

C:-CKP, CMP and TP

D:-ABS and SRS

Correct Answer:- Option-C

Question41:-To find the bearing oil clearance which gauge is used ?

A:-Feeler gauge

B:-Dial gauge

C:-Telescopic gauge

D:-Plastic gauge

Correct Answer:- Option-D

Question42:-The high pressure pump in CRDI system develops approximately _____ bar fuel pressure.

A:-2000

B:-1000

C:-700

D:-400

Correct Answer:- Option-A

Question43:-The flywheel stores energy during the power stroke are supplies it to the crank shaft during idle stroke. Which are the idle strokes ?

A:-Suction, Compression and Power

B:-Compression, Power and Exhaust

C:-Power, Exhaust and Suction

D:-Exhaust, Suction and Compression

Correct Answer:- Option-D

Question44:-Which of the following is correctly matched ?

A:-Bush-Take radial load

B:-Thrust washer-increases end ply

C:-Roller bearing-increases friction

D:-Teflon seal-causes leakage

Correct Answer:- Option-A

Question45:-Which component helps hold the selector shaft in the locking position ?

A:-Clutch plate

B:-Lock or spring-loaded ball

C:-Flywheel

D:-Brake shoe

Correct Answer:- Option-B

Question46:-The balls in a ball joint are guided by

A:-Spring

B:-Straight track

C:-Curved track

D:-Roller

Correct Answer:-Question Cancelled

Question47:-The vehicle load in a fully floating axle is taken by the

A:-Axle shaft

B:-Propeller shaft

C:-Axle housing

D:-Differential gear

Correct Answer:- Option-C

Question48:-When the free-wheeling hub is in the "FREE" position, the front wheels are

A:-Connected to the front axle drive

B:-Disconnected from the front axle drive

C:-Locked by the breaks

D:-Connected to the engine directly

Correct Answer:- Option-B

Question49:-Which component applies the automatic transmission brake band ?

A:-Brake drum

B:-Servo assembly

C:-Torque converter

D:-Oil pump

Correct Answer:- Option-B

Question50:-The three main members of a torque converter are

A:-Impeller, turbine and stator

B:-Clutch, brake and gear

C:-Flywheel, clutch and shaft

D:-Gear, shaft and bearing

Correct Answer:- Option-A

Question51:-What is the main advantage of a planetary gear system ?

A:-It eliminates lubrication

B:-It cannot transmit torque

C:-It has only one gear

D:-It provides multiple gear ratios in a compact arrangement

Correct Answer:- Option-D

Question52:-The two main pulleys in a CVT are generally called

A:-Rack and pinion pulleys

B:-Sun and star pulleys

C:-Sun and ring pulleys

D:-Drive and driven pulleys

Correct Answer:- Option-D

Question53:-What is the main purpose of a lock-up clutch in a torque converter ?

A:-Increase engine temperature

B:-Eliminate slip between the engine and transmission at suitable conditions

C:-Increase fuel consumption in all gear

D:-Stop the transmission input shaft

Correct Answer:- Option-B

Question54:-When the accelerator pedal is pressed fully, the tick down mechanism generally causes the transmission to

A:-Apply the parking lock

B:-Select neutral

C:-Downshift to lower gear

D:-Upshift to high speed gear

Correct Answer:- Option-C

Question55:-The side force sustained by the wheel during cornering divided by the slip angle is called

A:-Camber force

B:-Cornering power

C:-Cornering force

D:-Caster force

Correct Answer:- Option-B

Question56:-A loose power steering belt may cause all of these problems except

A:-Low power steering pump pressure

B:-Squealing during engine acceleration

C:-Damage to the power steering pump bearings

D:-Excessive steering effort

Correct Answer:- Option-C

Question57:-The distance between the steering axis and the tyre contact-area centerline at their intersections with the road surface is the

A:-Setback

B:-Thrust angle

C:-Camber angle

D:-Scrub radius

Correct Answer:- Option-D

Question58:-Which part of integral power steering reduce fluid pressure ?

A:-Rotary valve

B:-Torsion bar

C:-Flow control valve

D:-Unloading valve

Correct Answer:- Option-D

Question59:-Technician a says at low speed four-wheel steering causes the rear wheels to pivot in the same direction as the front wheels. Technician B says at high speed the rear wheels pivot in the opposite direction of the front wheels. Who is right ?

A:-A only

B:-B only

C:-Both A and B

D:-Neither A nor B

Correct Answer:- Option-D

Question60:-The vehicle ride will be smooth and comfortable if

A:-Unsprung weight is kept minimum

B:-Vehicle weight is kept minimum

C:-Sprung weight is kept minimum

D:-Unsprung weight is kept maximum

Correct Answer:- Option-A

Question61:-The provision made to allow a leaf spring to vary its length is a

A:-Sliding centre bolt

B:-Rubber U-bolt mounting

C:-Swinging shackle

D:-Spline in the spring eye

Correct Answer:- Option-C

Question62:-Which part of coil spring suspension allows angular movement of linkages ?

A:-Stabilizer bar

B:-Torsion bar

C:-Lower control arm

D:-Ball joint

Correct Answer:- Option-D

Question63:-Which type suspension gives the maximum room in the engine compartment ?

A:-Wishbone type suspension

B:-Mc Pherson strut suspension

C:-Vertical guide suspension

D:-Rigid axle suspension

Correct Answer:- Option-B

Question64:-The electronic air suspension switch should be in the off position if the

A:-Vehicle is boosted with a booster battery

B:-Vehicle is diagnosed with a scan tool

C:-Battery is being changed

D:-Vehicle is jacked up on one corner to change a tyre

Correct Answer:- Option-D

Question65:-The brake shoes in a typical drum brake are supported by the

A:-Back plate

B:-Disc rotor

C:-Master cylinder

D:-Booster diaphragm

Correct Answer:- Option-A

Question66:-In a tyre designation, the letter R normally indicates

A:-Reinforced rim

B:-Rear tyre

C:-Radial construction

D:-Raising application

Correct Answer:- Option-C

Question67:-Which component converts brake pedal force in to hydraulic pressure ?

A:-Master cylidner

B:-Wheel cylinder

C:-Brake shoe

D:-Brake drum

Correct Answer:- Option-A

Question68:-ASR used on heavy vehicles is principally intended to

A:-Prevent excessive drive-wheel slip during acceleration

B:-Prevent brake fluid evaporation

C:-Increase steering wheel diameter

D:-Replace the service brake

Correct Answer:- Option-A

Question69:-A wheel speed sensor in an ABS measures

A:-Engine speed

B:-Brake fluid pressure

C:-Rotational speed of the wheel

D:-Steering wheel angle only

Correct Answer:- Option-C

Question70:-Lowering the centre of gravity of a vehicle generally

A:-Raduces stability

B:-Improves stability against overturning

C:-Increases tyre diameter

D:-Eliminates lateral force

Correct Answer:- Option-B

Question71:-During hard braking, the rear wheels consistently lock before the front wheel. The most relevant system to inspect is the

A:-Proportioning control system

B:-Steering gear box

C:-Wheel bearing grease

D:-Clutch hydraulic circuit

Correct Answer:- Option-A

Question72:-In a drumbrake, the wheel cylinder normally

A:-Pulls the brake shoes inward

B:-Forces the brake shoes against the drum

C:-Rotates the drum

D:-Controls tyre pressure

Correct Answer:- Option-B

Question73:-A brake booster is primarily used to

A:-Increase the driver's pedal force assistance

B:-Increase wheels speed

C:-Reduce brake fluid boiling point

D:-Adjust wheel alignment

Correct Answer:- Option-A

Question74:-Hydraulic brakes operate fundamentally according to

A:-Ohm's law

B:-Pascal's law

C:-Hooke's law

D:-Faraday's law

Correct Answer:- Option-B

Question75:-Which of the following is not an insulator

A:-Air

B:-Glass

C:-Mercury

D:-Mica

Correct Answer:- Option-C

Question76:-When 3 resistors of 3 ohm each are connected in parallel, the total resistance in the circuit is

A:-1 ohm

B:-1.5 ohm

C:-3 ohm

D:-9 ohm

Correct Answer:- Option-A

Question77:-Which of the following statement is/are correct about lead acid batteries ?
i. The specific gravity of fully charged battery is 1.82.
ii. The colour of positive plate is chocolate brown.
iii. The ratio of acid and water in the electrolyte is 3 : 1.
iv. During charging, it liberates Hydrogen gas.

A:-Only i and ii

B:-Only ii

C:-Only ii and iv

D:-Only ii, iii and iv

Correct Answer:- Option-C

Question78:-A thyristor has _____ layers.

A:-1

B:-2

C:-3

D:-4

Correct Answer:- Option-D

Question79:-For amplifying electronic signals, the component used is

A:-Diode

B:-Transistor

C:-Resistor

D:-Capacitor

Correct Answer:- Option-B

Question80:-A distributer cap is made up of

A:-Bakelite

B:-Aluminium alloy

C:-Hard rubber

D:-Porcelain

Correct Answer:- Option-A

Question81:-In the electronic ignition system, which component in the circuit helps the ignition coil to produce high voltage

A:-Contact Breaker

B:-Condenser

C:-Timer

D:-Spark plug

Correct Answer:- Option-C

Question82:-In automobile starting system, most commonly used drive is

A:-Bendix drive

B:-Over-running clutch drive

C:-Sliding armature type

D:-Co-axial type

Correct Answer:- Option-A

Question83:-Normally how many diodes are used in an Alternator Rectifier ?

A:-1

B:-2

C:-3

D:-6

Correct Answer:- Option-D

Question84:-A Car's dashboard shows red colour battery warning symbol during running. What should be the reason ?
i. Battery expired and to be replaced.
ii. Alternator is not able to charge the battery.
iii. Alternator belt loosened.
iv. Engine temperature is high.

A:-i only correct

B:-i and ii only correct

C:-i, ii and iii only correct

D:-All are correct

Correct Answer:- Option-C

Question85:-What does a cornering light illuminate ?

A:-The vehicle back side illumination

B:-Highlight the blind spot during bend

C:-Illuminate rear interior of the vehicle

D:-The visibility of engine compartment to driver

Correct Answer:- Option-B

Question86:-Which of the following is the boiling point of refrigerant R-134a ?

A:-25.5°C

B:-23.0°C

C:--26.5°C

D:-28.8°C

Correct Answer:- Option-C

Question87:-What voltage is required to operate servo motor ?

A:-6V to 8V

B:-4.8V to 6V

C:-3.5V to 8V

D:-8V to 9.5V

Correct Answer:- Option-B

Question88:-Which component absorbs heat from the cabin air ?

A:-Evaporator

B:-Condenser

C:-Compressor

D:-Expansion valve

Correct Answer:- Option-A

Question89:-Which sensor detects the actual body temperature of occupants ?

A:-Evaporator temperature sensor

B:-Refrigerant pressure sensor

C:-Infrared sensor

D:-Outside air temperature sensor

Correct Answer:- Option-C

Question90:-A vehicle's location is determined using a group of four or more satellites by which system ?

A:-Triangulation

B:-Vehicle tracking system

C:-Telematic system

D:-Networking and multiplexing

Correct Answer:- Option-A

Question91:-What is the function of an engine immobilizer ?

A:-Control the air conditioning system

B:-Control the vehicle lighting

C:-Prevent from starting the engine

D:-Operate the power window

Correct Answer:- Option-C

Question92:-Which component rapidly inflate the air bag in few milli seconds during vehicle collision ?

A:-Seat belt pre tensioners

B:-Steering lock

C:-Brake actuator

D:-Inflator module

Correct Answer:- Option-D

Question93:-What does the vehicle horn produce a weak sound ?

A:-Cracked diaphragm

B:-Due to low battery voltage

C:-Relay points stuck up

D:-Due to high resistance in the horn circuit

Correct Answer:-Question Cancelled

Question94:-What is the use of the power window lockout switch ?

A:-Prevent accident

B:-Protect window glass

C:-To reduce battery load

D:-To increase window speed

Correct Answer:- Option-A

Question95:-In which form should an application for temporary registration of a vehicle be made ?

A:-Form 22

B:-Form 21

C:-Form 20

D:-Form 19

Correct Answer:- Option-C

Question96:-Engine lamp is used to

A:-Increase engine power

B:-Indicate problems in the engine management system

C:-Control fuel injection

D:-Control engine speed

Correct Answer:- Option-B

Question97:-At what age can a person drive a motorcycle without gear ?

A:-14 years

B:-16 years

C:-18 years

D:-21 years

Correct Answer:- Option-B

Question98:-TPS (Throttle Position Sensor) information is required to measure

A:-Engine load

B:-Timing

C:-EGR

D:-All of the above

Correct Answer:- Option-D

Question99:-A sensor may either generate a voltage or

A:-Measure temperature

B:-Control the engine

C:-Change resistance

D:-Store electrical energy

Correct Answer:- Option-C

Question100:-A special permit is issued under which section ?

A:-Section 88(8)

B:-Section 87(4)

C:-Section 85(8)

D:-Section 84(8)

Correct Answer:- Option-A