PROVISIONAL ANSWER KEY

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Question Paper Code:

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Exam:

Motor Transport Sub inspector (Trainee) Medium of Question: English Date of Test 04-09-2020 Department Police Motor Transport Wing Alphacode Question1:-Which of the following is an output device? A:-Microphone B:-Keyboard C:-Digitizer D:-Speakers Correct Answer:- Option-D Question2:-What is MICR? A:-Magnetic Ink Character Recognition B:-Microsoft Intrinsic Code Recorder C:-Magnetic Intensity Code Recognition D:-Micro Information Code Recorder Correct Answer: - Option-A Question3:-What is the binary representation of decimal number 12? A:-1010 B:-1100 C:-1011 D:-1110 Correct Answer:- Option-B Question4:-Which of the following is not a key property of a transaction carried out in a database system? A:-Durability **B:-Atomicity** C:-Information D:-Consistency Correct Answer:- Option-C Question5:-Which type of software is used for creating slide shows? A:-Spreadsheet software B:-Word-processing software C:-Presentation software D:-Web design software Correct Answer:- Option-C Question6:-Which of the following lets a computer communicate with variety of musical instruments? A:-MIDI B:-DMAIC C:-CDMA D:-DMIIC Correct Answer: - Option-A Question7:-An attack that tries to flood a computer resource with more requests than it can handle is known as ___ A:-Firewall B:-Spyware C:-Worms D:-DoS Attack Correct Answer:- Option-D Question8:-Malicious software that pose as legitimate programs or files that user may recognize and want to use are known A:-Trojan B:-Spam C:-Worm D:-Shield Correct Answer: - Option-A

Question9:-Which of the following is a Certifying Authority to issue Digital Signature Certificates in India?
A:-CCA
B:-Safescrypt
C:-Meity
D:-ISP
Correct Answer:- Option-B
Question10:-The information Technology Act was made effective from
A:-27 October 2009
B:-17 October 2008
C:-27 October 2001
D:-17 October 2000
Correct Answer:- Option-D
Question11:-In which place in Kerala the institute of Driver Training and Research situated?
A:-Kollam
B:-Edappal
C:-Aluva
D:-Thiruvanathapuram
Correct Answer:- Option-B
Question12:-What is the fine imposed for vehicles conducting service without valid insurance certificate?
A:-Rs. 5,000
B:-Rs. 10,000
C:-Rs. 500
D:-Rs. 2,000
Correct Answer:- Option-D
Question13:-Validity of Temporary registration certificate of new vehicles.
A:-30 days
B:-14 days
C:-7 days
D:-31 days
Correct Answer:- Option-A
Question14:-Function of EGR valve is to reduce
A:-Noise
B:-Emission
C:-Vibration
D:-Air intake
Correct Answer:- Option-B
Question15:-The term used to indicate the distance between the centre lines of the front and rear axles of a vehicle is called
A:-Wheel tract
B:-Wheel base
C:-Tyre width
D:-Body width
Correct Answer:- Option-B
Question16:-What type of registration number plates are used in Electric transport vehicles?
A:-Black lettering in Yellow background
B:-Black lettering in Yellow Buckground
C:-White lettering in Green background
D:-Yellow lettering in Green background
Correct Answer:- Option-D
Question17:-M.A.C.T. deal with
A:-Fitness test
B:-Driving test
C:-Accident claim
D:-Vision test
Correct Answer:- Option-C
Question18:-When the horn button is preseed the current flows to horn through:
A:-Flasher unit
B:-Horn relay
C:-Battery
D:-Starter motor

Correct Answer:- Option-B Question19:-What is the speed limit of a motor car in state highways? A:-90 km/hr B:-80 km/hr C:-60 km/hr D:-85 km/hr Correct Answer:- Option-B Question20:-Over speeding in vehicles, violation of section of MV Act 1988 and rules made there under? A:-120 B:-113 C:-112 D:-115 Correct Answer:- Option-C Question21:-In arc welding the temperature of heat produced by the electric arc is of the order``of A:-3000°C to 4000°C B:-4000°C to 5000°C C:-5000°C to 6000°C D:-6000°C to 7000°C Correct Answer:- Option-D Question 22: The temperature of air recorded by a thermometer, when its bulb is surrounded by a wet cloth exposed to the air, is called A:-wet bulb temperature B:-dry bulb temperture C:-dew point temperature D:-none of these Correct Answer: - Option-A Question23:-The ratio of heat extracted in the refrigerator to the workdone on the refrigerant is called A:-Coefficient of performance of refrigeration B:-Coefficient of performance of heat pump C:-relative coefficient of performance D:-refrigerating efficiency Correct Answer:- Option-A Question24:-A centrifugal pump will start delivering liquid only when the presure rise in the impeller is equal to the A:-kinetic head B:-velocity head C:-manometric head D:-static head Correct Answer:- Option-C Question25:-Internal gears can be made up A:-hobbing B:-shaping with pinion cutter C:-shaping with rack cutter D:-milling Correct Answer:- Option-B Question26:-A water tank contain 1.3 m deep water. The pressure eexerted by the water per metre length of the tank is A:-2.89 kN B:-8.29 kN C:-9.28 kN D:-28.9 kN Correct Answer:- Option-B Question27:-Carburising flame is used to weld A:-steel, cast iron, copper, aluminium etc B:-brass and bronze C:-hard surfacing materials such as satellite D:-all of these Correct Answer:- Option-C Question28:-Shock resisting steels should have A:-low wear resistance B:-low hardness

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C:-low tensile strength
     D:-toughness
    Correct Answer:- Option-D
Question29:-An eutectoid steel consists of
     A:-Wholly pearlite
     B:-wholly austenite
     C:-pearlite and ferrite
     D:-pearlite and cementite
     Correct Answer: - Option-A
Question30:-Side rake angles of a single point cutting tool is the angle
     A:-by which the face of the tool is inclined towards back
     B:-by which the face of the tool is inclined sideways
     C:-between the surface of the flank immediately below the point and a plane at right angles to the centre line of the
point of the tool
     D:-between the surface of the flank immediately below the point and a line drawn from the point perpendicular to the
base
     Correct Answer:- Option-B
Question31:-The percentage of carbon in cast iron varies from
     A:-0.1 to 0.5
     B:-0.5 to 1
     C:-1 to 1.7
     D:-1.7 to 4.5
     Correct Answer:- Option-D
Question32:-Static friction is always _____ dynamic friction
     A:-Equal to
     B:-Less than
     C:-Greater than
     D:-None of these
     Correct Answer:- Option-C
Question33:-Strian energy is the
     A:-Energy stored in a body when strained within elastic limits
     B:-Energy stored in a body when strained upto the breaking of a specimen
     C:-Maximum Strain energy which can be stored in a body
     D:-Proof Resilience Per Unit Volume of a Material
     Correct Answer: - Option-A
Question34:-Euler's formula holds good only for
    A:-short columns
     B:-long columns
     C:-both short and long columns
     D:-weak columns
     Correct Answer:- Option-B
Question 35:- A body is subject to a tensile stress of 1200 MPa on one plane and another tensile stress of 600 MPa on a plane
at right angle to the former. It is also subjected to a shear stress of 400 MPa on the same planes. The maximum normal
stress will be
    A:-400 Mpa
     B:-500 MPa
     C:-900 MPa
     D:-1400 MPa
     Correct Answer:- Option-D
Question36:-Smelting is the process of
     A:-removing the impurities like clay, sand etc. from the iron ore by washing with water
     B:-expelling moisture, carbon dioxide, sulphur and arsenic from the iron ore by heating in shallow kilns
     C:-reducing the ore with carbon in the presence of a flux
     D:-all of the above
     Correct Answer:- Option-C
Question37:-One litre of water occupies a volume of
     A:-100 `cm^(3)` ` `
     B:-250 `cm^3`
     C:-500 `cm^3`
     D:-1000 `cm^3`
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Correct Answer:- Option-D Question38:-In reaction turbine, draft tube is used. A:-To transport water downstream without Eddies B:-To convert the kinetic energy to flow energy by a gradual Expansion of the flow cross-section C:-For safety of turbine D:-To increase flow rate Correct Answer:- Option-B Question 39:- A four -cylinder engine has a capacity of 2.4 litres. The swept volume of one cylinder is $A:-400 \text{ cm}^{(3)}$ B:-600 `cm^3` C:-1200 `cm^3` D:-2400 `cm^3` Correct Answer:- Option-B Question40:-Coefficient of contraction is the ratio of A:-actual velocity of jet at vena contracta to the theoretical velocity B:-loss of head in the orifice to the head of water available at the exit of the orifice C:-actual discharge through an orifice to the theoretical discharge D:-area of jet at vena contracta to the area of orifice Correct Answer:- Option-D Question41:-Which of the following is a not a surface finishing process? A:-Honina B:-Buffing C:-Turning D:-Lapping Correct Answer:- Option-C Question 42:- The process of increasing the cross-section of a bar at the expense of its length, is called A:-Drawing down B:-Spinning C:-Upsetting D:-Peening Correct Answer:- Option-C Question43:-The mechanical efficiency of an impulse turbine is A:-ratio of the actual power produced by the turbine to the energy actually supplied by the turbine B:-ratio of the actual work available at the turbine to the energy imparted to the wheel C:-ratio of the work done on the wheel to the energy of the jet D:-None of the above Correct Answer:- Option-B Question44:-The process of beveling sharp ends of a workpiece is called as A:-Knurling **B:-Grooving** C:-Facing D:-Chamfering Correct Answer:- Option-D Question45:-What is meant by drag in casting process? A:-Upper Part of casting Flask B:-Molten Metal C:-Lower part of casting flask D:-upper and lower part of casting flask Correct Answer:- Option-C Question46:-A cycle consisting of one constant pressure, one constant volume and two isentropic processes is known as A:-Diesel cycle B:-Sterling cycle C:-Otto cycle D:-Carnot cycle Correct Answer:- Option-A Question47:-The amount of heat required to raise the temperature of the unit mass of gas through one degree at constant volume, is called

A:-Specific heat at constant volume B:-Specific heat at constant presuure

D:-None of these Correct Answer: - Option-A Question48:-An adiabatic process is one in which A:-no heat enters or laves the gas B:-the temperature of the gas changes C:-the change in internal energy is equal to the mechanical workdone D:-all of the above Correct Answer:- Option-D Question49:-The compression ratio for petrol engine is A:-3 to 6 B:-5 to 8 C:-15 to 2 D:-20 to 30 Correct Answer:- Option-B Question50:-In a glass tube type water indicator for a boiler, one end of the tube is connected to water space and the other end is connected to A:-water space also B:-chimney C:-steam space D:-superheater Correct Answer:- Option-C Question51:-In a 4 cylinder engine, the swept volume of all the cylinder are called, A:-Compression Ratio B:-Piston Displacement C:-Engine Capacity D:-Total Volume Correct Answer:- Option-C Question52:-Ovality and Taperness are measured for A:-Head Lamp **B:-Engine cylinders** C:-Starter Motors D:-Batters Correct Answer:- Option-B Question53:-Anti-freezing solution is employed as A:-Coolant material B:-Lubricant C:-Electrolyte D:-Brake Fluid Correct Answer: - Option-A Question54:-Pump and injector are combined into single unit in the case of system. A:-Unit injector B:-Jerk Pump C:-Common Rail D:-Distributor Correct Answer: - Option-A Question55:-Closing of a value after TDC or BDC is called A:-Valve lead B:-Valve lash C:-Valve overlap D:-Valve lag Correct Answer:- Option-D Question56:-Plastiguage is employed to measure A:-Toe in B:-Bearing clearence C:-Torque D:-Engine speed Correct Answer:- Option-B Question57:-Main purpose of Harmonic Balancer is to control

C:-Kilo Joule

B:-Emmission from Engine C:-Steering stability
D:-Torsional vibrations
Correct Answer:- Option-D
Question58:-Which among the following is not a part of crank shaft?
A:-Shank
B:-Main Journal
C:-Crank web
D:-Counter weight
Correct Answer:- Option-A
Question59:-Rapid movement of air from the cylinder walls to cylinder centre occuring, as the piston moves upward during
compression stroke, is called
A:-Seavenging
B:-Squish
C:-Swirl
D:-Blowby
Correct Answer:- Option-B
Question60:-Which among the following is not used in catalytic converter?
A:-Platinum
B:-Chromium
C:-Palledium
D:-Rhodium
Correct Answer:- Option-B
Question61:-In Hotchkiss drive, torque reaction is taken by
A:-Propeller shaft
B:-Frame
C:-Springs
D:-Axle casings
Correct Answer:- Option-C
Question62:-Release bearing in a clutch Assembly is also known as
A:-main bearing
B:-Roller bearing
C:-Throw-out bearing
D:-Bush bearing
Correct Answer:- Option-C
Question63:-To sustain a steady speed under varying road condition, thus allowing vehicle driver to relax from constant foo throttle manipulation is called
A:-Cruise control
B:-All wheel drive
C:-Viscous coupling
D:-Continuously variable transmission
Correct Answer:- Option-A
Question64:-Paddle shift is employed in type gearbox.
A:-Synchromesh
B:-Sliding mesh
C:-Constant mesh
D:-Sequential
Correct Answer:- Option-D
Question65:-"Fading" is a complaint related to
A:-Brakes
B:-Steering
C:-Head light
D:-Tyres
Correct Answer:- Option-A
Question66:-"Shackle" is a part of
A:-Air brake system
B:-Steering system
C:-Leaf spring assembly

A:-Noise level

Correct Answer:- Option-C
Question67:-A S.I engine continues to run for a very small period of time, even after ignition key is switched off. This phenomenon is called
A:-After burning
B:-Ignition load
C:-Dieseling
D:-Spark advance
Correct Answer:- Option-C
Question68:-Dimmer switch is a part of circuit.
A:-Turn signal light
B:-Head lamp
C:-Charging
D:-Rectifier
Correct Answer:- Option-B
Question69:-Anti-dazzle devices are employed in system.
A:-Indicator
B:-Starting
C:-Head Lamp
D:-Charging
Correct Answer:- Option-C
Question70:-The ballast resistor in ignition system serves the following function.
A:-Improves cold starting
B:-Produces high voltage
C:-Breaks primary circuit
D:-Reduces arcing
Correct Answer:- Option-A
Question71:-Length of the threaded portion of the spark plug is called
A:-Shell
B:-Ceramic Insulator
C:-Reach
D:-Core nose
Correct Answer:- Option-C
Question72:-The purpose of over running clutch in a starter motor drive is to
A:-Engage the pinion
B:-Disengage the pinion
C:-Start the motor
D:-Avoid damage to motor
Correct Answer:- Option-D
Question73:-Steering Wander is called when occurs.
A:-The oscillation of front wheels
B:-Exessive back lash
C:-Effort required to steer is more
D:-The moving of vehicle in one side
Correct Answer:- Option-D
Question74:-The angle between wheel axis to the vertical line, when viewing from the front of the vehicle is called
A:-King pin inclination
B:-Camber angle
C:-Caster angle
D:-Toe in
Correct Answer:- Option-B
Question75:-Brake chamber in a Air brake system is used for
A:-Actuating the cam
B:-Compressing the air
C:-Releasing the air
D:-Storing the air
Correct Answer:- Option-A
Question76:-The component which reduces the tendency of the vehicle to roll on either side, when taking a turn, is calle

D:-Wheels

A:-Torsion bar

B:-Telescopic shock absorber C:-Axle shaft D:-Stabilizer bar Correct Answer:- Option-D Question77:-The angle between the direction of motion of vehicle and the centre plane of tyre is known as A:-turning radius B:-slip angle C:-wheel alignment D:-toe-out Correct Answer:- Option-B Question78:-Plumb line method is using for checking the defects in A:-brake system B:-lighting circuit C:-fuel line D:-chassis frame Correct Answer:- Option-D Question79:-Pick out the one which is not a type of stub axle. A:-Elliptical B:-Lamoine C:-Elliot D:-Reversed Lamoine Correct Answer: - Option-A Question80:-Ply rating in tyres indictes A:-Type of tyre B:-Size of tyre C:-Tread thickness D:-Relative tyre strength Correct Answer:- Option-D Question81:-Any motor vehicle constructed to carry more than 6 persons excluding the driver is called A:-Maxi cab B:-Invalid carriage C:-Omni bus D:-Contract carriage Correct Answer:- Option-C Question82:-"Attraction" of a trip, when the vehicle is travelling is the A:-Starting point of journey B:-Beautiful places around C:-zones of destinations D:-sights during trip Correct Answer:- Option-C Question83:-The inward transverse inclination provided to the cross section of a carriage-way on horizontal curved portion of a road is A:-Gradient **B:-Super Elevation** C:-Summit Curve D:-Camber Correct Answer:- Option-B Question84:-The validity of certificate of fitness of a private car in India, for the first time is A:-15 years B:-10 years C:-2 years D:-1 year Correct Answer:- Option-A Question85:-An alternate mode of flexible passenger transportation that does not follow fixed routes and schedules is called A:-MAGLEV B:-Trailer on flat car C:-Para transit D:-Light rail transit Correct Answer:- Option-C

Question86:-A bus route, which has starting and terminating point is same, is called A:-Urban routes B:-Sub-urban routes C:-Moffusil routes D:-Ring route Correct Answer:- Option-D Question87:-A document which include statistical trip record and trip sheet in a bus operation is called A:-Wav bill B:-Duty roaster C:-Fare Table D:-Zonard sheet Correct Answer: - Option-A Question88:-The Yaw rate sensor in electronic stability control measures A:-Wheel speed B:-Rolling tendency C:-Steering wheel angle D:-Actual Car turning Correct Answer:- Option-D Question89:-White smoke from Diesel Engine arises due to A:-Suspension of soot particles B:-Low operating temperature C:-Incomplete combustion D:-exessive lubrication oil consumption Correct Answer:- Option-B Question90:-"CRDI" is related to A:-Ignition system B:-Fuel system C:-Suspension system D:-Emission norms Correct Answer:- Option-B Question91:-Article 360 of the Indian Constitution deals with? A:-National Emergency B:-Special status to Jammu and Kashmir C:-Financial Emergency D:-Election Commission of India Correct Answer:- Option-C Question92:-Which of the following statements are true with Fundamental Duties mentioned in the Indian Constitution? 1. It incorporated into the Constitution by the 42nd Constitutional Amendment Act of 1976 2. Ten Fundamental Duties were included by the 42nd Amendment Act 3. The 11th Fundamental Duty was incorporated by the 86th Constitutional Amendment Act, 2002 Select the correct answer using the code given below. A:-1 and 2 only B:-1 and 3 only C:-2 and 3 only D:-1.2 and 3 Correct Answer:- Option-D Question93:-In the case of death of the vice-president, the national flag shall be half-masted: A:-Throughout the country B:-Throughout the Delhi the only C:-Throughout the native state, the Vice-President belongs to D:-Throughout the National capital and native state of Vice-President Correct Answer: - Option-A Question94:-Which of the following statement is/are not true about the status of Governor of a state in India? A:-Appointment of the same person as a governor for two or more states is possible B:-A Governor acts as an agent of the central government

C:-A Governor is a nominal executive head (titular) or constitutional head) of the state D:-The office of governor of a state is an employment under the Central Government

Question95:-Choose the false statement among the following statements:

Correct Answer:- Option-D

A:-Art.31-c was introduced by the 25th Constitutional Act which gave Art. 39(b) and 39(c) precedence over fundamental Rights B:-Article 44, to protect all monuments of historic interest and national importance C:-Article 40, to organize village Panchayats as units of self government D:-The 25th Constitutional Act came to be challenged before the Supreme Court in Kesavananda Bharti case (1973) Correct Answer:- Option-B Question96:-The constituent Assembly of India was step up under the framework of? A:-Cabinet mission B:-Simon commission C:-Cripps mission D:-Mountbatten Plan Correct Answer: - Option-A Question 97:- Choose the wrong statement among the following statements: A:-Constituent Assembly ratified the India's membership of the common wealth in May 1949 B:-Constituent Assembly adopted the national flag on July 22, 1953 C:-Constituent Assembly adopted the national song on January 24,1950 D:-Constituent Assembly adopted the national anthem on January 24, 1950 Correct Answer:- Option-B is India's highest military decoration, awarded for displaying distinguished acts of valour during Question98:wartime A:-Bharat Ratna B:-The Param Vir Chakra C:-Vishisht Seva Medal D:-Kirti Chakra Correct Answer:- Option-B Question99:-With reference to the powers of Prime Minister which following is/are true? A:-He allocates and reshuffles various portfolios among the ministers B:-He can ask a minister to resign or advise the President to dismiss him in case of difference of Opinion C:-He recommends persons who can be appointed as ministers by the president D:-All of the above Correct Answer:- Option-D Question100:-The maximum membership of Rajya Sabha is limited to A:-250 B:-225 C:-450 D:-445 Correct Answer: - Option-A