## **PROVISIONAL ANSWER KEY**

**Question Paper Code:** 45/2016/OL Category Code: 277/2013 Exam: Junior Instructor Medium of Question: English Date of Test 26-04-2016 Alphacode А Question1:-Name the scheme launched by the Government of India for online booking of LPG cylinders. A:-Sahaj **B:-NITI** Aayog C:-Nirbaya D:-Mundra Correct Answer:- Option-A Question2:-'Akhila Thiruttu' was the publication of A:-Vaikunda Swamikal B:-Chattambi Swamikal C:-Sree Narayana Guru D:-Thycaud Ayya Correct Answer:- Option-A Question3:-Which is not the poem of O.N.V. Kuruppu ? A:-Kothambumanikal B:-Uppu C:-Moham D:-Karuna Correct Answer:- Option-D Question4:-Who was the chief guest during the occassion of `67^(th)` Republic Day of India ? A:-American President **B:-French President** C:-Srilakan President D:-King of Saudi Arabia Correct Answer:- Option-B Question5:-'Unfinished Dream' is the book written by A:-Muhammed Yunus B:-Vinod Rai C:-Muhammed Iqbal D:-Vargheese Kurian Correct Answer:- Option-D Question6:-Kerala Mineral and Metals is at A:-Valayar **B:-Chavara** C:-Kundara D:-Vizhinjam Correct Answer:- Option-B Question7:-Total area of Kerala is A:-38963 sq. km B:-38863 sq. km C:-38868 sg. km D:-38683 sq. km Correct Answer:- Option-B Question8:-Recently in which State Jats conducted movement for reservation ? A:-Haryana **B:-Gujarat** C:-Rajasthan D:-Madhya Pradesh Correct Answer:- Option-A Question9:-Kundara proclamation was issued by A:-Paliyath Achan

B:-Velu Thampi C:-Swathi Thirunal D:-Gouri Parvathi Bai Correct Answer:- Option-B Question10:-'Biosphere' was firstly used by A:-Brend Land **B:-Edward Suess** C:-Martin Luther **D:-Edward Jenner** Correct Answer:- Option-B Question11:-The study of mountains is A:-Petrology **B:-Potomology** C:-Orology D:-Climatology Correct Answer:- Option-C Question12:-Who is the leader of Patel Strike in Gujarat ? A:-Ahammed Patel **B:-Harthwik Patel** C:-Sardar Patel D:-Vithal Radadia Correct Answer:- Option-B Question13:-The Round Table Conferences were held in A:-America B:-London C:-Geneva D:-Gujarat Correct Answer:- Option-B Question14:-Forward Bloc was formed in A:-1938 May `1^(st)` B:-1940 May `1^(st)` C:-1939 May `3^(rd)` D:-1937 May `3^(rd)` Correct Answer:- Option-C Question15:-In 1955 Imperial Bank of India was nationalised and renamed as A:-State Bank of India **B:-Reserve Bank of India** C:-Punjab National Bank **D:-Indian Bank** Correct Answer:- Option-A Question16:-The Unit of atmospheric pressure is A:-Joule B:-Tesla C:-Dioptre D:-Hectopascal Correct Answer:- Option-D Question17:-The number of West flowing rivers in Kerala A:-33 B:-3 C:-14 D:-41 Correct Answer:- Option-D Question18:-In which year was the Presidential Rule enforced in Kerala for the first time ? A:-1949 B:-1959 C:-1958 D:-1948 Correct Answer:- Option-B Question19:-Who founded Pratyaksha Raksha Daiva Sabha for social reformation of Christians in Kerala ?

A:-Poikayil Sri Kumara Gurudevan B:-Dr. Palpu C:-Chavara Elias Kuriakose D:-Pandit Karuppan Correct Answer:- Option-A Question20:-The outbreak of which mosquito born virus causes birth defects in new born babies has been reported in Latin America ? A:-AIDS B:-SARS C:-Ebola D:-Zika Correct Answer:- Option-D Question21:-To continue running the engine must have A:-Braking, electrical, electronics and steering systems B:-Power train, suspensions, steering and body C:-Fuel, ignition, lubricating and cooling systems D:-Power train, ignition, suspension, cooling systems Correct Answer:- Option-C Question22:-Which provide information to electronic control module ? A:-Sensors **B:-Output** C:-Actuators D:-Control unit Correct Answer:- Option-A Question23:-Periodic maintenance or preventive maintenance helps to A:-Schedule brake down B:-Eliminate routine service C:-Driver to use self service D:-Prevent failure Correct Answer:- Option-D Question24:-Hand brakes are applied on A:-The rear wheels only B:-The front wheels only C:-All wheels D:-Transmission Correct Answer:- Option-A Question25:-What are the causes of accidents in the workshop ? A:-Defective parts **B:-Defective equipments** C:-Faulty workmanship D:-Failure to follow instructions Correct Answer:- Option-D Question26:-Never running an engine in the closed room because the exhaust gas contains A:-Air B:-Blue smoke C:-Carbon monoxide D:-Water vapor Correct Answer:- Option-C Question27:-The diameter of a piston is three inches, in metric system the diameter is A:-76.2 cm B:-67.2 cm C:-67.2 mm D:-76.2 mm Correct Answer:- Option-D Question28:-In the radiator pressure cap contains A:-Only pressure valve B:-Only vacuum valve C:-Only blow-off valve D:-Both vacuum and pressure valves

Correct Answer:- Option-D Question29:-The function of fly wheel is A:-Smoothen the power flow B:-Serve as the part of the clutch C:-For starting purpose D:-All of the above Correct Answer:- Option-D Question30:-Excessive end play of the crank shaft is prevented by using A:-Sleeve bearing **B:-Thrust bearing** C:-Shaft journal D:-Fly wheel Correct Answer:- Option-B Question31:-The throttle position sensor can be checked by A:-A digital voltmeter B:-An ohmmeter C:-Ammeter D:-All of the above Correct Answer:- Option-B Question32:-In petrol fuel injection system, the two positions of injectors are A:-In the cylinder and on the intake port B:-On the two sides on the air horn C:-The throttle body and in the intake port D:-Intake and exhaust ports Correct Answer:- Option-C Question33:-Which type of tool is used to tighten bolt and nut with specified torque ? A:-Double end spanner **B:-Socket wrench** C:-Torque wrench D:-Ring spanner Correct Answer:- Option-C Question34:-Two type of fuel supply system used in SI engine are A:-Carbureted and diesel B:-Fuel injection and diesel C:-Port and throttle body D:-Fuel injection and carburattor Correct Answer:- Option-D Question35:-In the clutch disc, the torsional vibrations is absorbed by the A:-Splines **B:-Friction pad** C:-Coil springs **D:-Cushion springs** Correct Answer:- Option-C Question36:-The distance difference between the vehicle wheel bases from one side to the other is known as A:-Thrust radius B:-Wheel track C:-Scrub radius D:-Set back Correct Answer:- Option-D Question37:-In throttle body injection system install the injector using new "O" rings lubricated or coated with A:-Petrol **B:-Rubber sealent** C:-Gasket sealer D:-Clean engine oil Correct Answer:- Option-D Question38:-The basic control device of the carborattor is A:-Needle valve B:-Chock valve C:-Throttle valve

D:-Main jet Correct Answer:- Option-C Question39:-In mac pherson-strut suspension system the upper end of the strut is attached to the A:-Upper arm **B:-Steering knuckle** C:-Vehicle body D:-King pin Correct Answer:- Option-C Question40:-To change reciprocating motion to rotary motion, the engine has A:-Crankshaft and camshaft B:-Piston and connecting rod C:-Camshaft and connecting rod D:-Connecting rod and crankshaft Correct Answer:- Option-D Question41:-In the diesel engine, the air is compressed to a little as A:-1/4 of its original volume B:-1/10 of its original volume C:-1/22 of its original volume D:-1/50 of its original volume Correct Answer:- Option-C Question42:-When the gear ratio through the transmission is 1 : 1, the transmission is in A:-Over drive B:-Direct drive C:-Medium drive D:-Neutral Correct Answer:- Option-B Ouestion43:-The least count of a steel rule is A:-1.0 mm B:-0.5 mm C:-0.5 cm D:-1.0 cm Correct Answer:- Option-B Question44:-The mechanical speedometer, drive gear mounted on the A:-Input shaft B:-Clutch shaft C:-Counter gear shaft D:-Output shaft Correct Answer:- Option-D Question45:-Which test is conducted to know the chemical condition of the plate of a lead acid battery ? A:-High discharge test B:-Open volt test C:-Cadmium test D:-Specific gravity test Correct Answer:- Option-C Question46:-Another name of formula wheel is known as A:-Pressed steel disc wheel B:-Light alloy wheel C:-Disc wheel D:-Wire Wheel Correct Answer:- Option-B Question47:-The engine valves are closed by A:-Camshaft B:-Rocker shaft C:-Valve springs D:-Tappet Correct Answer:- Option-C Question48:-The carburattor, the fuel in the float bowl is kept at a constant level by the action of A:-Opening of the throttle valve B:-Fuel pump

C:-Float and needle valve D:-Pressure regulator Correct Answer:- Option-C Question49:-Which components help to control body roll when cornering or driving rough road. A:-Sway bar B:-Lower control arm C:-Upper control arm D:-King pin Correct Answer:- Option-A Question50:-Any short circuit in the armature winding tested with A:-Multimeter **B:-Ammeter** C:-Voltmeter D:-Growler Correct Answer:- Option-D Question51:-Out of round brake drums causes the tires to wear A:-On the side B:-On the outer side C:-A single spots D:-Edges Correct Answer:- Option-C Question52:-The primary function of lubrication is to A:-Provide cooling effect B:-Provide sealing effect C:-Provide cleaning effect D:-Reduce wear Correct Answer:- Option-D Question53:-An indication of ignition quality of a diesel fuel is given by A:-Detonation **B:-Octane number** C:-Cetane number D:-Pre-ignition Correct Answer:- Option-C Question54:-Calorific value of diesel fuel is A:-50 MI/KG B:-50 KJ/KG C:-50 J/KG D:-50 GJ/KG Correct Answer:- Option-A Question55:-Which type of valve are used in I.C. engines ? A:-Sleeve valve **B:-Rotary valve** C:-Reed valve D:-Poppet valve Correct Answer:- Option-D Question56:-Which type of the pistons used in two stroke engines ? A:-Flat head B:-Concave head C:-Domed head D:-Irregular head Correct Answer:- Option-C Question57:-Which are constant clearance pistons ? A:-Steel-belted piston **B:-Slipper piston** C:-Cam ground piston D:-Slot skirt piston Correct Answer:- Option-D Question58:-Which type of bearings used in wheel hub ? A:-Taper roller bearing

**B:-Roller** bearing C:-Ball bearing D:-Bush bearing Correct Answer:- Option-A Question59:-Which type of camshaft drive mechanism is used in over head camshaft engine ? A:-All of the above B:-Gear drive C:-None of the above D:-Chain drive Correct Answer:- Option-D Question60:-The purpose of the waste gate in the turbo charger is A:-Produce over boost B:-Prevent over boost C:-Cool the air fuel mixture D:-Heat the air fuel mixture Correct Answer:- Option-B Question61:-Which type of water pump are used in I.C. engines ? A:-Centrifugal pump B:-Vane pump C:-Gear pump D:-Crescent pump Correct Answer:- Option-A Question62:-Clutch dragging is noticeable at A:-Gear shifting B:-At low speed C:-At high speed **D:-During acceleration** Correct Answer:- Option-A Question63:-The distance measured from some specific point on the body, frame or suspension to the ground is known as A:-Suspension height **B:-Front end geometry** C:-Camber D:-Caster Correct Answer:- Option-A Question64:-Advantages of helical gear rather than spur gear in transmission is A:-Low cost B:-Less and thrust C:-Economy D:-Low noise Correct Answer:- Option-D Question65:-In carburattor the transfer port comes into operation A:-At maximum engine speed B:-During slow speed operation C:-When engine is idling D:-After engine is turned off Correct Answer:- Option-B Question66:-The bearing clearance is never measured with A:-Vernier caliper **B:-Feeler** gauge C:-Plastic gauge D:-Micrometer Correct Answer:- Option-D Question67:-The car air conditioning system the three major enemies are A:-Gasoline, oil and electricity B:-Moisture, dirt and air C:-Cold weather, high altitude and humidity D:-Hot weather, low altitude and humidity Correct Answer:- Option-B Question68:-The function of over drive is

A:-To step up gear ratio B:-To step down gear ratio C:-To increase torque D:-To reduce speed Correct Answer:- Option-A Question69:-The ratio of height and width of the tire is known as A:-Aspect ratio B:-Tire type C:-Rim diameter D:-All of the above Correct Answer:- Option-A Question70:-The parking brake are generally operated by A:-Electrically **B:-Mechanically** C:-Hydraulically D:-Air pressure Correct Answer:- Option-B Question71:-In suspension system, the weight supported by the springs is A:-Sprung weight **B:-Unsprung weight** C:-Vehicle weight D:-Gross weight Correct Answer:- Option-A Question72:-In rear wheel drive vehicle with front engine, the drive lines contains two joints, these are A:-C V joints and U joint B:-Slip joint and U joint C:-Rzeppa joint and slide joint D:-Trunnion joint and slip joint Correct Answer:- Option-B Question73:-Which transport vehicle is used to transporting passengers over long distance and provide luxurious interior, adjustable seats ? A:-Bus B:-Mini bus C:-Traveller D:-Coach Correct Answer:- Option-D Question74:-The function of gear box in an automobile is A:-Vary speed **B:-Vary torque** C:-Reveres position D:-Provide neutral position Correct Answer:- Option-B Question75:-The longitudinal distance between the centre line of the front and rear axle is A:-Wheel track B:-Front over hang C:-Wheel base D:-Rear over hang Correct Answer:- Option-C Question76:-The engine is mounted on front of the driver's cabin; this type of chassis is known as A:-Conventional control B:-Semi forward control C:-Full forward control D:-None of the above Correct Answer:- Option-A Question77:-Which type of rivets are used for clutch facing are attached to the hub plate ? A:-Steel rivets **B:-Aluminium rivets** C:-Brass rivets D:-Steel screws

Correct Answer:- Option-C Question78:-Which type of gear box double de clutching is essential ? A:-Clash type **B:-Constant mesh** C:-Synchromesh D:-Selector mechanism Correct Answer:- Option-B Question79:-As the shock absorber compressed the fluid pass through the piston orifice and A:-Out of dust shield B:-In to the upper part of the cylinder C:-In to the lower part of the cylinder D:-Out of air chamber Correct Answer:- Option-A Question80:-The car air conditioning system, if the compressor runs no temperature between the low pressure and high pressure line indicates A:-Full refrigerants in the system B:-Over charge of refrigerants in the system C:-Normal system operation D:-No refrigerants in the system Correct Answer:- Option-D Question81:-Which type of rear axle, the wheel is directly connected to the axle shaft A:-Three guarter floating **B:-Semi floating** C:-Full floating D:-Dead axle Correct Answer:- Option-B Question82:-Continuity in the starter motor in the field winding can be tested with A:-Multimeter B:-Ammeter C:-Voltmeter D:-Growler Correct Answer:- Option-A Question83:-The sum of camber angle and king pin inclination is called A:-Caster B:-Toe-in C:-Included angle D:-Steering axis inclination Correct Answer:- Option-C Question84:-The color of the negative plate of a lead acid battery A:-Brown B:-Grav C:-White D:-Black Correct Answer:- Option-B Question85:-The ratio of side force sustained and slip angle of a wheel during cornering is A:-Cornering power B:-Camber force C:-Cornering force D:-All of the above Correct Answer:- Option-A Question86:-In rack and pinion gear box the rack is attached to A:-Stub axle B:-Tie rod C:-Relay rod D:-Pitman arm Correct Answer:- Option-B Question87:-In steering linkage another name for the drag link is A:-Link rod B:-Track rod

C:-Tie rod D:-Drop arm Correct Answer:- Option-A Question88:-Which part of the tyre contact with the road surface when the wheel rolls ? A:-Bead **B:-Carcass** C:-Thread D:-Side walls Correct Answer:- Option-C Question89:-In an engine stroke length is A:-Half throw of crank B:-Double throw of crank C:-Throw of crank D:-Three times throw of crank Correct Answer:- Option-B Question90:-Brakes fading occurs at A:-High speed B:-Low speed C:-Continuous application D:-Brake lining worn-out Correct Answer:- Option-C Question91:-The air removing process of the hydraulic brake system is known as A:-Bleeding **B:-Produce excess pressure** C:-Filling of excess fluid D:-All of the above Correct Answer:- Option-A Question92:-In service procedure, to install means to A:-Put back the same part you removed B:-Repair the dismantled part C:-Re assemble a component D:-Remove and replace the part Correct Answer:- Option-A Question93:-Which meter indicate the total mileage covered ? A:-Speedometer **B:-Odometer** C:-Ammeter D:-Voltmeter Correct Answer:- Option-B Question94:-Which instrument is used to measure the speed of a running vehicle ? A:-Odometer B:-Laser speed gun C:-Laser stick D:-Speedometer Correct Answer:- Option-B Question95:-Steering ratio of the steering gear is the ratio between A:-Number of degrees of steering wheel must turn to the front wheel turn to the one degree B:-Number of degrees of steering wheel must turn to the back wheel turn to the one degree C:-None of the above D:-All of the above Correct Answer:- Option-A Question96:-The working principle of hydraulic brake system A:-Lenz's law B:-Pascal's law C:-Fleming's law D:-Newton's law Correct Answer:- Option-B Question97:-When it is operated, which mechanism is going to off stage A:-Brake

**B:-Differential** C:-Clutch D:-Wheel Correct Answer:- Option-C Question98:-The purpose of tyre sipes is A:-Increase thread life B:-Decrease noise level C:-Provide softer ride D:-Increase traction Correct Answer:- Option-D Question99:-In two stroke engines has 'port' on A:-Cylinder head B:-Cylinder walls C:-Crank case D:-Cylinder liner Correct Answer:- Option-B Question100:-Which one of the engine has longest crank shaft ? A:-In-line engine **B:-Radial engine** C:-Opposed engine D:-V-type engine Correct Answer:- Option-A