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049/2018 1. The only State in India which is having a river named after it is B) Meghalaya A) Manipur C) Tripura D) Mizzoram 2. Port Blair is the Capital of A) Pondichery B) Laksha Dweep C) Daman and Diu D) Andaman and Nicobar Islands 3. Which Five Year Plan is also known as "Mahalanobis Model" ? A) First B) Second C) Third D) Fourth 4. Who was called 'Father of Indian unrest'? A) M. K. Gandhi B) Dadabhai Navaroji C) Bala Gangadhara Tilak D) Gopal Krishna Gokhale 5. Who was the author of 'Poverty and Un British Rule in India' ? A) R. S. Sharma B) Dadabhai Navaroji C) M. K. Gandhi D) A. R. Desai 6. Mahatma Gandhi gave the call 'Do or Die' during A) Non Co-operation Movement B) Lahore Congress C) Dandi March D) Quit India Movement 7. In which year Indian National Congress declared 'Poorna Swaraj' as its goal ? A) 1906 B) 1920 C) 1929 D) 1942 8. Who was made the leader of 1857 revolt? A) Bahadur Shah II B) Jhansi Rani D) Mangal Pandey C) Nana Saheb 9. Which is the largest backwater in Kerala? A) Sasthamcotta lake B) Vembanad lake C) Kayamkulam lake D) Ashtamudi lake 10. The Cherambadi Pass connects Kerala with A) Coorg B) Mysore C) Coimbatore D) Madurai

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11. What was the early name of Thycaud AyyA) Kunjan PillaiC) Narendran	ra Swamikal ? B) Kumaran D) Subharayan
12. Who was the author of 'Veena Poovu' ?A) ChangampuzhaC) Kumaran Asan	B) Vallathol D) G. Shankara Kurup
13. Kallumala Samaram of 1915 was organizA) AyyankaliC) K. Ayyappan	ed by B) K. Kelappan D) Mannath Padmanabhana
14. Who was the founder of 'Prathyaksha RalA) VagbhatanandanC) Poikayil Yohannan	ksha Daiva Sabha' ? B) Brahmananda Siva Yogi D) T. M. Varghese
15. Chattampi Swamikal had taken his last brA) VaikomC) Sivagiri	eath at B) Panmana D) Chempazhanthi
16. Which day onwards the GST (Goods andA) April 1, 2017C) July 1, 2017	Services Tax) was implemented in India ? B) June 1, 2017 D) August 1, 2017
17. Who is the Chief Election Commissioner of A) Nasim ZaidiC) J. M. Lyngdoh	of India ? B) V. S. Sampath D) Achal Kumar Jyoti
18. Which country won the ICC Women's WoA) IndiaC) France	rld Cup in 2017 ? B) England D) South Africa
19. Who won the Nobel Prize for literature in 2A) Bob DylanC) Svetlana Alexievich	2016 ? B) Juan Manuel Santos D) Yoshinori
20. Which became the first Indian City declareA) CalcuttaC) Patna	ed by UNESCO as World Heritage City ? B) Agra D) Ahmedabad
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- 21. In order to maintain uniform temperature all along circumference and to avoid sticking, of valves ______ is used.
 - A) Rocker arm B) Guide
 - C) Spring D) Rotator
- 22. An engine having equal bore and stroke is called
 - A) Square engine B) Radial engine
 - C) Wankel engine D) Gas turbine
- 23. To eliminate slapping tendency of pistons towards cylinder, the following method is used
 - A) Cylinder liners B) Gasketing of piston
 - C) Offsetting D) Dual chroming

24. Automotive connecting rods are generally made by

- A) Casting B) Grinding
- C) Cutting D) Forging
- 25. Steel inserts in auto thermic pistons are used to
 - A) Reduce piston size
 - B) Control the expansion
 - C) Reduce the piston inertia
 - D) Increase temperature
- 26. A dish on the piston head is provided for
 - A) Controlling compression ratio
 - B) Lowering piston weight
 - C) Employing valve clearance
 - D) Avoiding piston slap
- 27. The clearance provided between the cam and tappet to allow for expansion due to heat, is called
 - A) Valve lead B) Valve lash
 - C) Valve clearance D) Tappet clearance
- 28. The face angle of exhaust valve is

A)	65°	B)	30°
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- C) 45° D) 70°
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- 29. Plastigauge is used to find the clearance of
 - A) Piston pin B) Bearing
 - C) Rings D) Valves
- 30. The valve guide stem clearance is measured by using a
 - A) Inside vernier calliper
 - B) Scriber
 - C) Dial Gauge
 - D) Inside micrometer
- 31. When pressure in the cooling system exceeds a certain predetermined value, the excess pressure will be released to atmosphere through
 - A) Blow off valve B) Pressure valve
 - C) Vacuum valve D) Expansion reservoir
- 32. The compression ratio at which the detonation starts is known as
 - A) Detonating compression ratio
 - B) Optimum ratio
 - C) Preignition ratio
 - D) HUCR

33. In a carburettor, when the choke is applied, the fuel comes out from

- A) Acceleration part B) Auxiliary jet
- C) Main jet D) Idle jet
- 34. The phenomenon by which the engine continuing to run even after the ignition is turned off is called
 - A) Run over B) Knocking
 - C) Dieseling D) Run-in
- 35. The end of a philips type screw driver is
 - A) Flat blade B) With four grooves
 - C) Fluted end D) Slab head
- 36. The fluctuation of engine speed during a cycle depends upon
 - A) Speed of flywheel B) Speed of piston
 - C) Weight of crankshaft D) Mass of flywheel

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- 37. The stroke is increased when the
 - A) Connecting rod lengthened
 - B) Piston is shortened
 - C) Crank throw is lengthened
 - D) Piston pin shortened
- 38. The type of fuel injector nozzles used with pre combustion chamber engines are
 - A) Pintle type B) Hole type
 - C) Pinax type D) Pneumatic type
- 39. Identify the one which is not a cold starting device in diesel engines
 - A) Chemical spray B) Heater plugs
 - C) Aneroids D) Decompression devices
- 40. A component which is employed to avoid overheating of ignition coil
 - A) Contact breaker B) Capacitor
 - C) Iron core D) Ballast resistor
- 41. Vacuum advance mechanism provide ignition advance according to
 - A) Fuel consumption B) Engine speed
 - C) Engine load D) Ignition timing
- 42. Spark plug having white insulator tip indicates
 - A) Retarded ignition
 - B) Incorrect dwell
 - C) Very high secondary voltage
 - D) Over advanced ignition
- 43. A component used for accurate timing of electronic fuel injection due to its high accuracy and long term reliability, is

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- A) Hall effect sensor B) Pulse generator
- C) Thyratron D) CDI system
- 44. A fully discharge battery have its positive plates covered with

A) PbO ₂	B) Pb
C) PbH ₂ O	D) PbSO ₄

45.	Number of	batteries	can be	charged	at a	time using
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A) Constant voltage charging

B) Constant current charging

D) Trickle charging

C) Booster charging

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- 46. In an alternator the magnetic field is produced in the
 - A) Commutator B) Stator
 - C) Rotor D) Housing
- 47. The stator of an alternator have
 - A) One winding B) Three windings
 - D) Four windings C) Two windings
- 48. Pick out the one which is not an inertia drive
 - B) Rubber spring type drive A) Folo thru drive
 - C) Dyer drive D) Standard Bendix drive
- 49. "ISAD" stands for
 - A) Integrated Starter Alternator Damper
 - B) Intelligent Starting And Detachment
 - C) International System of Automotive Designs
 - D) Indian Society for Automobile Designs
- 50. For a stoichiometric air fuel mixture, the excess of air consumed by the engine will be equals
 - A) 0.5 B) 1.0
 - C) 1.5 D) 0.95
- 51. Charcoal canister is used to absorb
 - A) Hydro carbon B) Fuel vapour
 - C) Water vapour D) Emissions

52. In petrol engines; the three way catalytic converter, the first converter controls

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- A) CO B) HC
- C) NO D) Particulate Matter
- 53. Doubling the engine cylinder diameter increases the piston thrust by
 - A) 2 times B) 4 times
 - C) 8 times D) 6 times
- Α

54.	The firing order of a six cylinder engine is		
	A) $1 - 3 - 5 - 6 - 2 - 4$	B)	1 - 3 - 5 - 2 - 4 - 6
	C) $1 - 3 - 2 - 6 - 4 - 5$	D)	1-5-3-6-4-2
55.	The distance between TDC to BDC, in deg	gree	9
	A) 180	B)	90
	C) 360	D)	45
56.	The needle valve of the carburettor is close	ed b	by means of a
	A) Spring	B)	Tickler
	C) Float	D)	Throttle
57.	Increase in the plate area of a battery cell i	ncre	eases
	A) The voltage	B)	The specific gravity
	C) The resistance	D)	The capacity
58.	Chemical condition of the battery plates ca	ın b	e identified by
	A) High Discharge test	B)	Cadmium test
	C) Life test	D)	Sulphation test
59.	The cut out relay is not essential in alternato below that of the battery is not allowed by	rs b	ecause current flow due to fall in voltage
	A) Commutator	B)	Third brush
	C) Rectifier	D)	Electromagnetic regulator
60.	The distance from the gasket seat to the en	nd c	of the threads of a spark plug, is called
	A) Reach	B)	End clearance
	C) Shoulder height	D)	Plug clearance
61.	Engine valves are closed by means of		
	A) Rocker arm	B)	Tappet
	C) Valve guide	D)	Spring
62.	In a distributor type fuel pump, the injection	n tin	ning is controlled by adjusting
	A) Rotor speed	B)	Anti-Dribble valve
	C) Cam ring	D)	Plunger stroke
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- 63. The purpose of a governor in an engine is to
 - A) Limit speed
 - B) Limit the power
 - C) Limit the fuel economy
 - D) Limit the fuel cutoff
- 64. Pick out the Engine indicator which does not have any inertia effect.
 - A) Electrical type B) Optical type
 - C) Mechanical type D) Hydraulic type
- 65. The vibration damper on a crank shaft of an engine, reduces the
 - A) Longitudinal vibrations
 - B) Sequential vibrations
 - C) Transverse vibrations
 - D) Torsional vibrations
- 66. The angle through which the wheel turns to sustain the side forces, is called
 - A) Slip angle
 - B) Thrust angle
 - C) Steering axis inclination
 - D) Set back angle
- 67. The ratio of tyre section height to the tyre section width is called
 - A) Aspect ratio B) Ply rating ratio
 - C) Offset ratio D) Shoulder ratio
- 68. The decrease in the effectiveness of brakes with prolonged application is called
 - A) Skidding B) Bleeding
 - C) Fading D) Slipping
- 69. In a car, the pillar onto which the front door latches and the rear door is hinged is called

A) B pillar	B) C pillar
C) A pillar	D) D pillar

- 70. The suspension link connecting the vehicle body at one end and the live axle beam at the other end is called
 - A) Torsion bar B) Wishbone link
 - C) Trailing arm D) Panhard rod
- 71. A heavy goods vehicle consisting of a tractor and a semi-trailer is called
 - A) Station wagon B) Articulated vehicle
 - C) Coupe with coach D) Van truck
- 72. If the engine is mounted completely inside the drivers cabin, that type chassis is called
 - A) Conventional control type
 - B) Fully inside type
 - C) Engine forward type
 - D) Full forward control type
- 73. Defects in vehicle frame can be identified by checking with
 - A) Laser beam B) Level rod
 - C) Plumb line D) Bevel protractor
- 74. Clutch drag is a trouble experienced due to
 - A) Excessive free pedal play
 - B) Weak clutch springs
 - C) Worn-out clutch facings
 - D) Worn-out clutch splines

75. The oil used for gear box lubrication is

- A) SAE 120 B) SAE 90
- C) SAE 180 D) SAE 160
- 76. Rzeppa joint is an example of
 - A) Hooke's joint
 - B) Constant velocity joint
 - C) Variable velocity joint
 - D) Slip joint

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77. Final drive mechanism of a vehicle consist of A) Differential unit B) Sungear and axle shafts C) Axle shaft and hub D) Crownwheel and pinion 78. In hotchkiss drive rear axle mechanism, the torque reaction is taken up by B) Shackle A) Universal joints C) Springs D) Axle casing 79. Torsion bar in suspension system takes only A) Longitudinal stress B) Lateral stress C) Driving thrust D) Shear stress 80. Trailing link suspension is an example of A) Live axle suspension B) Hydrostatic suspension C) Independent suspension D) De Dion suspension 81. The positive castor in the wheels results in a natural tendency to A) toe-in B) toe-out C) roll-in D) decrease the effort to turn the steering wheel 82. The ratio between side force sustained by a wheel and slip angle is called A) Camber force B) Self righting torque C) Pneumatic trail D) Cornering power 83. Wheel tramp is a trouble caused by A) Wheel bearing tight B) Incorrect kingpin inclination C) Incorrect castor D) Incorrect tie-in 84. In a tyre, the term "ply rating" indicates A) Aspect ratio B) Number of plies

C) Thread numbering

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D) Rated strength

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85. The tyre sipes helps to A) Increase traction B) Increase tyre life C) Increase cornering effort D) Increase speed 86. Antilock Brake System works on the principle of A) Channeling of fluids B) Frictional stability C) Weight transferring D) Pressure modulation 87. The shape of reflector used in head lamp of an automobile is A) Round **B)** Parabolic C) Spherical D) Hyperbolic 88. The instrument used to indicate the engine RPM at any instant is called A) Odometer B) Speedometer D) Oscilloscope C) Tachometer 89. In an air brake system, the valve meant to control the intensity of braking is called A) Unloader valve B) Brake valve C) Slack valve D) Metering valve 90. An epicyclic gear train is used in A) Over drive B) torque convertor C) CVT D) Freewheel unit 91. The device used to reduce the exhaust noise is known as A) Exhaust pipe B) Exhaust manifold D) Muffler C) Tail pipe 92. As carbon accumulates in a cylinder it causes an increase in A) Clearance volume B) Compression ratio C) Piston displacement D) Volumetric efficiency 93. Radiator tubes are generally made of A) Steel B) Aluminium C) Cast iron D) Brass

- 94. Ignition coil is used to
 - A) Step up voltage B) Step up current
 - C) Step up spark D) Step up power
- 95. In a diesel engine fuel injection pump, the effective pressure stroke of plungers are regulated by means of a
 - A) Needle valve
 - C) Cam shaft

- B) Control rack
- D) Rotor

- 96. A hot spark plug has a
 - A) Long heat path
 - B) Short heat path
 - C) Short insulator nose
 - D) Bigger thread diameter
- 97. The size of the engine intake valve is
 - A) Smaller than the exhaust valve
 - B) Same as that of exhaust valve
 - C) Larger than the exhaust valve
 - D) Depends on the temperature of ambient air
- 98. A smoky blue exhaust is due to
 - A) Incomplete combustion
 - B) Rich mixture
 - C) Incorrect valve adjustment
 - D) Burning of oil in combustion chamber
- 99. Speedometer drive is usually taken from
 - A) Gear box B) Flywheel
 - C) Axle shaft D) Fan belt
- 100. The knocking in S.I. engines can be prevented, if the end mixture is having
 - A) High density B) Low density
 - C) High temperature D) Low pressure

Space for Rough Work

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