

Automobile Engineering

1. The main function of a carburetor is to:

- (A) Mix air and fuel
- (B) Supply air
- (C) Supply fuel only
- (D) Clean air

Answer: A) Mix air and fuel

2. The term "MPFI" stands for:

- (A) Multi Point Fuel Injection
- (B) Main Power Fuel Ignition
- (C) Multi Plug Fuel Ignition
- (D) Manual Pump Fuel Injector

Answer: A) Multi Point Fuel Injection

3. The function of a catalytic converter is to:

- (A) Reduce exhaust emissions
- (B) Mix fuel
- (C) Increase power
- (D) Cool engine

Answer: A) Reduce exhaust emissions

4. The normal battery voltage in automobiles is:

- (A) 6 volts
- (B) 12 volts
- (C) 24 volts
- (D) 48 volts

Answer: B) 12 volts

5. The differential in automobile is used to:

- (A) Allow rear wheels to rotate at different speeds
- (B) Increase speed
- (C) Connect engine to gearbox
- (D) Reduce vibration

Answer: A) Allow rear wheels to rotate at different speeds

6. In a four-stroke petrol engine, the spark plug fires at:

- (A) End of compression stroke
- (B) End of exhaust stroke
- (C) Mid suction stroke
- (D) Beginning of expansion stroke

Answer: A) End of compression stroke

7. The commonly used steering gear in cars is:

- (A) Rack and pinion
- (B) Worm and worm wheel
- (C) Bevel gear
- (D) Epicyclic gear

Answer: A) Rack and pinion

8. The radiator in an automobile cools:

- (A) Engine coolant
- (B) Engine oil
- (C) Transmission fluid
- (D) Brake fluid

Answer: A) Engine coolant

9. The brake system which uses compressed air is:

- (A) Air brake

- (B) Hydraulic brake
- (C) Mechanical brake
- (D) Disc brake

Answer: A) Air brake

10. The device which supplies electrical energy for engine starting is:

- (A) Battery
- (B) Dynamo
- (C) Alternator
- (D) Starter motor

Answer: A) Battery

11. Clutch is placed between:

- (A) Engine and gearbox
- (B) Gearbox and wheels
- (C) Differential and axles
- (D) Gearbox and propeller shaft

Answer: A) Engine and gearbox

12. "OHV" in automobile engines stands for:

- (A) Over Head Valve
- (B) Over Head Vent
- (C) Out Highway Vehicle
- (D) Operator Handling Vehicle

Answer: A) Over Head Valve

13. Turbocharger is driven by:

- (A) Exhaust gases
- (B) Engine oil pressure
- (C) Crankshaft
- (D) Electric motor

Answer: A) Exhaust gases

14. The basic function of suspension system is to:

- (A) Absorb shocks and vibrations
- (B) Increase speed
- (C) Allow wheel alignment
- (D) Reduce steering effort

Answer: A) Absorb shocks and vibrations

15. The type of drive commonly used in cars is:

- (A) Rear wheel drive
- (B) Front wheel drive
- (C) Four wheel drive
- (D) All of these

Answer: D) All of these

16. The main function of silencer is to:

- (A) Reduce exhaust noise
- (B) Increase power
- (C) Clean exhaust
- (D) Mix air-fuel

Answer: A) Reduce exhaust noise

17. In a disc brake, the disc is attached to:

- (A) Wheel
- (B) Chassis
- (C) Axle
- (D) Gearbox

Answer: A) Wheel

18. The "king pin" is part of the:

- (A) Steering system
- (B) Suspension system
- (C) Gearbox
- (D) Differential

Answer: A) Steering system

19. The cetane number is used for:

- (A) Diesel fuel quality
- (B) Petrol fuel quality
- (C) Lubricant quality
- (D) Coolant quality

Answer: A) Diesel fuel quality

20. Ball joints are used in:

- (A) Suspension and steering
- (B) Engine
- (C) Transmission
- (D) Battery

Answer: A) Suspension and steering

21. Drum brakes work on the principle of:

- (A) Friction
- (B) Magnetic field
- (C) Air resistance
- (D) None

Answer: A) Friction

22. In automobiles, "ECU" stands for:

- (A) Engine Control Unit
- (B) Electrical Current Unit
- (C) Engine Coolant Unit

(D) Engine Cycle Unit

Answer: A) Engine Control Unit

23. The main component of electric horn is:

(A) Electromagnetic coil

(B) Battery

(C) Switch

(D) Diaphragm

Answer: A) Electromagnetic coil

24. A propeller shaft is used in:

(A) Rear wheel drive vehicles

(B) Front wheel drive vehicles

(C) Both

(D) None

Answer: A) Rear wheel drive vehicles

25. The purpose of master cylinder in brake system is to:

(A) Deliver hydraulic pressure

(B) Supply air

(C) Control clutch

(D) Release air

Answer: A) Deliver hydraulic pressure

26. The unit for measuring tire pressure is:

(A) PSI

(B) Volts

(C) Amps

(D) KPI

Answer: A) PSI

27. The arrangement for lubrication in engine is:

- (A) Dry sump
- (B) Wet sump
- (C) Both
- (D) Forced feed

Answer: C) Both

28. The coolant temperature is measured by:

- (A) Thermometer
- (B) Thermostat
- (C) Pressure gauge
- (D) Dipstick

Answer: A) Thermometer

29. The term "DOHC" refers to:

- (A) Double Over Head Camshaft
- (B) Diesel Overhead Cam
- (C) Direct Overhead Compression
- (D) Double Oil Hydraulic Cam

Answer: A) Double Over Head Camshaft

30. The function of a fuel injector is to:

- (A) Atomize fuel
- (B) Measure air
- (C) Filter fuel
- (D) Control spark

Answer: A) Atomize fuel

31. The air filter removes:

- (A) Dust and foreign particles
- (B) Fuel

- (C) Oil
- (D) Coolant

Answer: A) Dust and foreign particles

32. The final drive in automobile is:

- (A) Differential
- (B) Propeller shaft
- (C) Axle
- (D) Gearbox

Answer: A) Differential

33. The shock absorber works on:

- (A) Hydraulic resistance
- (B) Air compression
- (C) Spring action
- (D) Direct drive

Answer: A) Hydraulic resistance

34. Rear axle in cars may be:

- (A) Live axle
- (B) Dead axle
- (C) Semi-floating
- (D) All

Answer: D) All

35. The alternator supplies:

- (A) AC current
- (B) DC current
- (C) Both
- (D) Static current

Answer: A) AC current

36. The ignition system in petrol engine is generally:

- (A) Battery ignition
- (B) Magneto ignition
- (C) Both
- (D) None

Answer: C) Both

37. The spark plug gap affects:

- (A) Ignition
- (B) Compression
- (C) Lubrication
- (D) Suspension

Answer: A) Ignition

38. The frame of a vehicle provides:

- (A) Support for aggregates
- (B) Mounting for body
- (C) Strength to the vehicle
- (D) All

Answer: D) All

39. Viscosity index is related to:

- (A) Lubricating oil
- (B) Brake fluid
- (C) Coolant
- (D) Grease

Answer: A) Lubricating oil

40. Which is a type of steering geometry?

- (A) Ackermann

- (B) Worm
- (C) Steering arm
- (D) Tie rod

Answer: A) Ackermann

41. The universal joint is used to:

- (A) Transmit power at variable angle
- (B) Change gear
- (C) Reduce vibration
- (D) Pump oil

Answer: A) Transmit power at variable angle

42. "MacPherson strut" is a type of:

- (A) Front suspension
- (B) Rear axle
- (C) Gearbox
- (D) Differential

Answer: A) Front suspension

43. Brake fade occurs due to:

- (A) Overheating
- (B) Oil leak
- (C) Air in line
- (D) Weak spring

Answer: A) Overheating

44. The main purpose of a thermostat is to:

- (A) Control engine temperature
- (B) Control speed
- (C) Control pressure
- (D) Control air-fuel ratio

Answer: A) Control engine temperature

45. Manual transmission provides:

- (A) Driver selection of gears
- (B) Automatic gears
- (C) No gear change
- (D) Fixed ratio

Answer: A) Driver selection of gears

46. Synchromesh gearbox synchronizes:

- (A) Gear speeds during changing
- (B) Engine speed
- (C) Steering
- (D) Fuel injection

Answer: A) Gear speeds during changing

47. Timing belt drives:

- (A) Camshaft
- (B) Crankshaft
- (C) Piston
- (D) Wheel

Answer: A) Camshaft

48. Anti-lock Braking System (ABS) prevents:

- (A) Wheel lock during braking
- (B) Suspension failure
- (C) Engine overheat
- (D) Clutch slip

Answer: A) Wheel lock during braking

49. Wheel alignment checks:

(A) Camber, toe, and caster

(B) Suspension

(C) Tyre pressure only

(D) Cylinder head

Answer: A) Camber, toe, and caster

50. Multi-plate clutch is used for:

(A) Motorcycles

(B) Trucks

(C) Heavy vehicles

(D) All

Answer: D) All

51. In battery, the electrolyte is:

(A) Sulfuric acid

(B) Nitric acid

(C) Hydrochloric acid

(D) Water

Answer: A) Sulfuric acid

52. ECU controls:

(A) Fuel injection

(B) Ignition

(C) Emission

(D) All

Answer: D) All

53. The tyre tread provides:

(A) Grip on road

(B) Color

(C) Weight

(D) Wheels

Answer: A) Grip on road

54. Gear oil is usually:

(A) Higher viscosity than engine oil

(B) Lower viscosity

(C) Same viscosity

(D) Not used

Answer: A) Higher viscosity than engine oil

55. Wheel balancing prevents:

(A) Vibration and uneven tyre wear

(B) Misalignment

(C) Overheating

(D) Steering

Answer: A) Vibration and uneven tyre wear

56. First automobile was powered by:

(A) Steam

(B) IC engine

(C) Electric motor

(D) Solar power

Answer: A) Steam

57. The horn circuit uses:

(A) Relay

(B) Battery directly

(C) Resistor only

(D) Alternator

Answer: A) Relay

58. The muffler in exhaust does:

- (A) Muffle sound
- (B) Filter gases
- (C) Mix air
- (D) Increase pressure

Answer: A) Muffle sound

59. Thread pattern in tyres is for:

- (A) Water expulsion and grip
- (B) Appearance only
- (C) Reducing weight
- (D) Preventing puncture

Answer: A) Water expulsion and grip

60. The term “overdrive” means:

- (A) Gear ratio less than 1
- (B) Gear ratio more than 1
- (C) Direct drive
- (D) Reverse gear

Answer: A) Gear ratio less than 1

61. Charging system keeps battery:

- (A) At full charge
- (B) Low
- (C) Never charged
- (D) Overcharged

Answer: A) At full charge

62. The field winding in DC generator provides:

- (A) Magnetic field
- (B) Rotating torque

(C) Electrical energy

(D) Output

Answer: A) Magnetic field

63. "Chassis" is:

(A) Frame and underbody

(B) Engine

(C) Tyre

(D) Battery

Answer: A) Frame and underbody

64. The hydrometer measures:

(A) Specific gravity of electrolyte

(B) Battery voltage

(C) Oil volume

(D) Fuel

Answer: A) Specific gravity of electrolyte

65. "Run-flat" tyres are designed for:

(A) Driving after puncture

(B) Racing only

(C) Low speed

(D) Heavy vehicles

Answer: A) Driving after puncture

66. Parking brake generally acts on:

(A) Rear wheels

(B) Front wheels

(C) Both

(D) All wheels

Answer: A) Rear wheels

67. Brake lining is made of:

- (A) Asbestos
- (B) Rubber
- (C) Nylon
- (D) Plastic

Answer: A) Asbestos

68. If alternator fails, what happens?

- (A) Battery discharges
- (B) Engine runs faster
- (C) Lights become brighter
- (D) Steering locks

Answer: A) Battery discharges

69. The flywheel helps to:

- (A) Store rotational energy
- (B) Increase torque only
- (C) Reduce noise
- (D) Cool engine

Answer: A) Store rotational energy

70. Freewheeling unit in transmission allows:

- (A) Wheels to rotate independently of engine
- (B) Engine to rotate independently of wheels
- (C) Brakes to engage
- (D) Clutch to slip

Answer: A) Wheels to rotate independently of engine

71. Air bags in vehicles are triggered by:

- (A) Crash sensors

- (B) Steering input
- (C) Engine temperature
- (D) Horn

Answer: A) Crash sensors

72. The main function of a stabilizer bar is to:

- (A) Prevent body roll
- (B) Increase tyre pressure
- (C) Improve engine cooling
- (D) Charge battery

Answer: A) Prevent body roll

73. Modern wiper motors are:

- (A) Electric
- (B) Pneumatic
- (C) Hydraulic
- (D) Steam-driven

Answer: A) Electric

74. A dead axle:

- (A) Does not transmit power
- (B) Transmits power
- (C) Transmits torque
- (D) None

Answer: A) Does not transmit power

75. "Wheelbase" is the distance between:

- (A) Front and rear wheel centers
- (B) Left and right wheels
- (C) Driver and engine
- (D) Gearbox and wheels

Answer: A) Front and rear wheel centers

76. The OBD system in cars stands for:

- (A) On-Board Diagnostics
- (B) One Body Design
- (C) Over Battery Drive
- (D) Overhead Brake Drum

Answer: A) On-Board Diagnostics

77. Types of drive arrangement include:

- (A) Front-wheel drive
- (B) Rear-wheel drive
- (C) All-wheel drive
- (D) All

Answer: D) All

78. Rack and pinion steering converts:

- (A) Rotary to linear motion
- (B) Linear to rotary motion
- (C) Torque to speed
- (D) Speed to torque

Answer: A) Rotary to linear motion

79. The glow plug is used in:

- (A) Diesel engines
- (B) Petrol engines
- (C) Both
- (D) Electric vehicles

Answer: A) Diesel engines

80. Clutch-free pedal provides:

(A) Safety when shifting gears

(B) Slow acceleration

(C) Low fuel use

(D) Increased tyre life

Answer: A) Safety when shifting gears

81. Air conditioning in vehicles is used for:

(A) Cabin cooling/heating

(B) Oil cooling

(C) Engine cooling

(D) Brake cooling

Answer: A) Cabin cooling/heating

82. Suspension system mainly includes:

(A) Springs and dampers

(B) Axles only

(C) Gears only

(D) Clutch and gearbox

Answer: A) Springs and dampers

83. The main function of transmission oil is:

(A) Lubricate gearbox components

(B) Clean tyres

(C) Cool radiator

(D) Seal gaskets

Answer: A) Lubricate gearbox components

84. Hill-hold control is used to:

(A) Prevent rollback on gradients

(B) Increase speed

(C) Engage reverse

(D) Reduce tyre wear

Answer: A) Prevent rollback on gradients

85. EGR stands for:

(A) Exhaust Gas Recirculation

(B) Engine Gas Reduction

(C) Extra Gear Reduction

(D) Electronic Gear Regulation

Answer: A) Exhaust Gas Recirculation

86. Catalytic converter contains:

(A) Platinum, palladium

(B) Copper

(C) Aluminum

(D) Lead

Answer: A) Platinum, palladium

87. Tyre rotation means:

(A) Changing tyres among wheels

(B) Making wheel spin

(C) Removing tyres

(D) Balancing wheels

Answer: A) Changing tyres among wheels

88. DEF fluid in diesel vehicles reduces:

(A) NOx emissions

(B) CO2

(C) Fuel use

(D) Noise

Answer: A) NOx emissions

89. Integrated Child Seat means:

- (A) Built into vehicle seat
- (B) Booster seat
- (C) Removeable seat
- (D) Inflatable seat

Answer: A) Built into vehicle seat

90. Power window operates with:

- (A) Electric motor
- (B) Spring
- (C) Cable
- (D) Air pressure

Answer: A) Electric motor

91. ZEV stands for:

- (A) Zero Emission Vehicle
- (B) Zero Engine Vacuum
- (C) Zoom Enabled Vehicle
- (D) Zero Electric Vehicle

Answer: A) Zero Emission Vehicle

92. GPS helps in:

- (A) Navigation
- (B) Cleaning
- (C) Braking
- (D) Accelerating

Answer: A) Navigation

93. Laminated glass is used for:

- (A) Front windshield
- (B) Rear window

(C) Headlights

(D) Mirrors

Answer: A) Front windshield

94. A run-on flat tyre can be driven at least:

(A) 50 km

(B) 1 km

(C) 200 km

(D) 500 km

Answer: A) 50 km

95. The main function of the speedometer is:

(A) Display vehicle speed

(B) Show engine rpm

(C) Measure oil pressure

(D) Indicate coolant level

Answer: A) Display vehicle speed

96. Hybrid vehicles use:

(A) Two or more power sources

(B) Only one engine

(C) Only batteries

(D) None

Answer: A) Two or more power sources

97. Most modern vehicles use which fuel injection type?

(A) Multi-point injection

(B) Single point injection

(C) Direct carburetion

(D) Mechanical injection

Answer: A) Multi-point injection

98. Power steering reduces:

- (A) Steering effort
- (B) Fuel consumption
- (C) Rolling resistance
- (D) Tyre wear

Answer: A) Steering effort

99. Monocoque chassis means:

- (A) Body and frame as single unit
- (B) Separate frame
- (C) Twin bodywork
- (D) Aluminum body

Answer: A) Body and frame as single unit

100. The least polluting vehicle is:

- (A) Electric vehicle
- (B) Diesel vehicle
- (C) Petrol vehicle
- (D) LPG vehicle

Answer: A) Electric vehicle
