AUTOMOBILE CBCGS KT EXAM QB

The main advantage of fluid coupling is

a. In its low torque capacity at low speeds
b. Steady state torque characteristics
c. Due to its ability to slip
d. Due to its ability to function fluid medium

An automatic transmission works on the principal of

a. Centrifugal device making up changes proportional to road
b. Centrifugal device connected to crankshaft making up changes proportional to engine speed
c. Make changes depending on throttle position in conjunction with road speed governor
d. Make gear changes at equal interval or set road speed

The following provides a smooth means of disengagement and engagement between the engine and the remainder of transmission system

(A) Clutch

(B) Gearbox

(C) Propeller shaft

(D) Differential

In four wheel drive there is (are)

(A) no live axle

(B) one live axle

(C) two live axles

(D) one dead axle

The torque at the driving wheels gives rise to a propulsive force between wheels and road, known as

(A) tractive force

(B) driving effort

(C) braking thrust

(D) Driving thrust

Coil springs absorb shocks by
(A) bending

(B) twisting

(C) compression

(D) tension

The material used for making torsion bar is
(A) Steel

(B) Cast iron

(C) High carbon steel

(D) Composite material

Shackles are sort of
(A) coupling

(B) link

(C) spring

(D) Bars

Spring shackles are used to join
(A) chassis frame and spring

(B) Spring and Axle

(C) chassis frame and axle

(D) Spring and frame

The following represents the correct specification of a tyre
(A) 155-80-R-13

(B) R-155-80-13

(C) 155-80-13-R

(D) 155-R-80-13

Telescopic shock observer consists of
(A) One chamber

(B) two chambers

(C) three chamber

(D) four chambers

Cam actuated double acting hydraulic shock absorber contains
(A) no piston

(B) single piston

(C) double pistons

(D) three pistons

The following is one of the type of independent suspension system

(A) Wishbone Arm system

(B) Wishbone Link system

(C) Trailing Pillar system

(D) Sliding Link system

Un-sprung weight is
(A) Weigh of vehicle

(B) Weigh of chassis frame

(C) Weight of wheels

(D) Weight of wheels and axles

Sprung weight is
(A) Weigh of vehicle minus unsprung weight

(B) Weigh of chassis frame

(C) Weight of wheels

(D) Weight of wheels and axles

A combination of roll and pitch is called
A) circular pitch

(B) lateral pitch

(C) transverse pitch

(D) diagonal pitch

Which of the following factors is not related to the effect of independent front suspension

a. Reducing the unsprung masses
b. Reducing tyre wear

c.Elemination of unsprung mass
d. Elimination of gyroscopic couples

What is the angle between the steering axis and the vertical in the plane of the wheel?
a) Castor
b) Camber
c) Steering axis inclination
d) Kingpin inclination

If the front of the front wheels is inside and rear of front wheels are apart when the vehicle is at rest, then the configuration is called?
a) Toe-in
b) Toe out
c) Positive camber
d) Positive castor

What is the name of the angle through which the wheel has to turn to sustain the side force?
a) Slip angle
b) Castor angle
c) Camber
d) Kingpin inclination

What is called the cornering force over the slip angle?
a) Castor trail
b) Cornering power

c) Self-righting torque
d) Pneumatic trail

What is a condition called when the vehicle will try to move away from its normal direction and to keep it on the right path there is need to steer a little?
a) Understeer
b) Oversteer
c) Reversibility
d) Irreversibility

What is the purpose of the reciprocating ball type steering gear?
a) To reduce the operating cost
b) To reduce the number of parts
c) To reduce the operating friction
d) To reduce the toe-out during the turns

What is the angle between the vertical when the top of the wheel slants outward?
a) Negative camber
b) Negative castor
c) Positive camber
d) Positive castor

Which types of wheels cannot be used with a tubeless tire?
a) Disc wheel
b) Light alloy wheel
c) Wire wheel
d) Composite wheel

Which type of wheels is preferred in sports cars?
a) Disc wheel
b) Wire wheel
c) Magnesium alloy wheel
d) Aluminum alloy wheel

In case of a wire wheel, the vehicle weight is supported by the wire in _____
a) Tension
b) Bending
c) Shear
d) Compression

What does the ‘ply rating’ refer to?
a) Aspect ratio
b) Rated strength
c) Recommended inflation pressure
d) The actual number of plies

Where will an underinflated tire wear the thread most?
a) Near center
b) Near the edge
c) In the cross direction
d) In the lateral direction

Where will an overinflated tire wear the thread most?
a) Near center
b) Near the edge
c) In the cross direction
d) In the lateral direction

What does the code 145 SR -13 tire designation represent?
a) 145” width, 13” diameter, cross-ply
b) 145 mm width, 13” diameter, radial-ply
c) 145” width, 13 cm diameter, radial-ply
d) 145 mm width, 13 cm diameter, cross-ply

In Magneto Ignition system
(A) No battery is required

(B) Engine starting is rather difficult

(C) used in high speed engines

(D) All of the above

In four cylinder in-line engine, the probable firing order is
(A) 1-3-4-2

(B) 1-2-3-4

(C) 2-4-1-3

(D) 2-1-3-4

A solid state switch, known as Thyristor is employed in
(A) Battery coil ignition system

(B) Magneto Ignition system

(C) Electronic Ignition system

(D) Capacitive discharge Ignition system

The automotive battery is also known as _____
a) lithium ion battery
b) lead-acid storage battery
c) zinc carbon battery
d) weston cell battery

What is present inside a battery?
a) Electrolyte
b) Fluids
c) Acid
d) Steam

What do batteries emit while charging?
a) Nitrogen
b) Oxygen
c) Hydrogen
d) Carbon

In which ignition switch position is the power supplied to ignition circuit?
a) Off switch position
b) Run switch position
c) Start switch position
d) Lock switch position

Neutral safety switch varies due to changes in _____
a) ignition
b) applying clutch
c) gear transmission
d) brakes

Why is a thermistor used in an alternator regulator?
a) To control maximum current
b) To control maximum voltage
c) To compensate for temperature change
d) To control minimum current

At the start of the engine, the charging voltage is _____
a) Lower
b) Higher
c) Same
d) Zero

In an alternator, which component controls the output?
a) Voltage regulator
b) Cutout relay
c) Current regulator
d) Diode

Which of the following is not an advantage of the alternator?
a) Higher output
b) Lower weight
c) Less maintenance
d) High efficiency

The main feature of Macpherson strut suspension is that

(A) The vertical size of the suspension can be made more compact
(B) Non vertical external forces are supported by the suspension arms
(C) The unsprung mass in lighter
(D) The assembly is slightly more complicated in design

The loads supported by an automobile frame are
a) Weight of the body, passengers and cargo loads
b) Torque from engine and transmission
c) Sudden impacts from collisions
d) All of the mentioned

An automobile chassis does not include which one of the following parts
a) Shock absorbers
b) Steering system
c) Differential
d) Brakes

The basic function of suspension is to

a. Absorb vibration and impact forces from the road surface

b. Ensure that the steering wheel can deliver a suitable amount of steering force

c. Ensure that wheel alignment is not distributed during driving

d. Automatically corrects the effect of over steering