

These are sample MCQs to indicate pattern, may or may not appear in examination

Q=QUESTION

question_description

A=ANSWER

answer_description

MODULE 1

Q Which amongst below is not a part of Micro hybrid electric vehicle

A Small I C Engine

A Electric Motor

A Auxillary battery

A Large Storage battery

Q Which of the following is also known as full hybrid?

A Micro hybrid

A Mild Hybrid

A Strong hybrid

A I C Engine

Q In terms of storage capacity, the accumulator of which of following vehicle type is powerful?

A I.C.Engine

A Mild hybrid

A Micro hybrid

A Full hybrid

Q When using Start Stop system,ECU checks following conditions except,

A Gears are in neutral

A Vehicle is cruising

A Speed sensor in ABS indicates zero

A Battery sensor indicator indicates sufficient energy for starting

Q Ideally Fuel savings of how much percentage can be achieved by using Start Stop system?

A 5-10%

A 15-20%

A 3.5-4.5%

A 11-14%

MODULE 2

Q The ampere hour capacity of battery depends on

- A Thickness of plate
- A Distance between the plates
- A The number and area of plates
- A The strength of electrolyte
- Q The internal resistance of discharged battery is
- A High
- A Low
- A Remains same
- A negative
- Q In order to increase ampere hour rating of battery it is connected in
- A Series
- A Parallel
- A Series parallel
- A star
- Q According to a 20 hour rate,a battery that can deliver 5A for 20 Hours with cell voltage remaining above 1.75 V would be rated as
- A 6Ah
- A 8Ah
- A 35Ah
- A 100Ah
- Q Four cells are connected in parallel and rating of each cell is 1.5V and 16Ah.What will be the Ah rating of this battery?
- A 16Ah
- A 32Ah
- A 48Ah
- A 64Ah

MODULE 3

- Q “Regenerative Braking” could be possible because
- A Conversion of kinetic energy of brakes into electrical energy by generator
- A Conversion of kinetic energy of brakes into electrical energy by motor
- A Conversion of static energy of brake into electrical energy by generator
- A Conversion of static energy of brake into electrical energy by motor
- Q Function of Brakes is defined by everything except :

- A Decelerate a vehicle including stopping
- A Maintain vehicle speed during downhill operation
- A Hold the vehicle stationary on a grade
- A Cruising while climbing
- Q The brake system converts _____ energy of vehicle motion into _____
- A Potential energy into Kinetic energy
- A Heat energy into Kinetic energy
- A Kinetic energy into heat
- A Potential energy into heat
- Q In terms of overall energy efficiency ,the advantage of hybrid over conventional vehicle are following except:
- A Regenerative braking
- A Efficient ICE operation including reduction in idle
- A Smaller ICE
- A Higher weight
- Q In series hybrid
- A Both ICE and Electric motor is coupled with transmission
- A Only ICE is coupled with transmission
- A Neither ICE nor Electric motor is coupled with transmission
- A ICE is coupled with generator to produce electricity

MODULE 4

- Q In Front electric rear hybrid mode, During full throttle _____ drives front axle while _____ drives rear axle.
- A ICE, Rear EM
- A Front EM,Both ICE and Rear EM
- A Front EM,ICE
- A Front EM,Rear EM
- Q In Front electric rear hybrid mode, During normal driving _____ alone propels the _____ axle of vehicle.
- A Front EM,front
- A Rear EM,front
- A ICE, rear
- A Rear EM,Rear

Q In Front electric rear hybrid mode, During braking _____ acts as generator to charge the battery.

A Front EM

A Rear EM

A Both Front EM and Rear EM

A Front EM and Rear ICE

Q In Front electric rear hybrid mode, For battery charging during driving _____ output is split to propel _____ axle and to drive rear electric motor to charge battery.

A Front EM, front

A Front EM, Rear

A ICE ,rear

A Rear EM, rear

Q In parallel hybrid electric drive trains the power from _____ are added together by mechanical coupler.

A ICE

A EM

A Generator

A ICE and EM

MODULE 5

Q In case of dual transmission parallel hybrid drive train, which configuration provides many tractive profiles?

A Transmission 1 multigear Transmission 2 multigear

A Transmission 1 multigear Transmission 2 single gear

A Transmission 1 single gear Transmission 2 multigear

A Transmission 1 single gear Transmission 2 single gear

Q In case of dual transmission parallel hybrid drive train, for which configuration the selection of proper gear control system is most complicated?

A Transmission 1 multigear Transmission 2 multigear

A Transmission 1 multigear Transmission 2 single gear

A Transmission 1 single gear Transmission 2 multigear

A Transmission 1 single gear Transmission 2 single gear

Q In which parallel hybrid drive train configuration transmission is located between the torque coupler and the drive shaft?

- A Parallel Hybrid drivetrain with torque coupling (Pre transmission)
A Parallel Hybrid drivetrain with torque coupling (Post transmission)
A Parallel Hybrid drivetrain with speed coupling (Pre transmission)
A Parallel Hybrid drivetrain with speed coupling (Post transmission)
Q Complex hybrid drivetrain architecture uses which of the following?
A Only torque coupling
A Only speed coupling
A Both Speed and Torque coupling
A Neither speed nor torque coupling
Q Complex hybrid drivetrain architecture uses _____ for speed coupling?
A Clutch
A Single gear transmission
A Multi gear transmission
A Planetary gear unit

MODULE 6

- Q Series hybrid is also called as
A Pure electric vehicle
A Generator based Electric vehicle
A ICE assisted EV
A Motor assisted EV
Q The size of series hybrid drive train is
A Small
A is equal to ICE counterpart
A Large and bulky
A compact
Q Series hybrid drive train is most commonly not found in _____ because of its size.
A Heavy commercial vehicles
A Military vehicles
A Buses
A Passenger cars
Q In parallel hybrid systems propulsion power is supplied by everything below except
A ICE alone
A EM alone

- A Neither ICE nor Motor
- A Both ICE and Motor
- Q In parallel hybrid
- A Both ICE and Electric motor is coupled with transmission
- A Only ICE is coupled with transmission
- A Neither ICE nor Electric motor is coupled with transmission
- A ICE is coupled with generator to produce electricity