

Reg.No. _____



Karunya UNIVERSITY

(Karunya Institute of Technology & Sciences)
(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

End Semester Examination – Nov/Dec – 2016

Code : 14EE2020
Sub. Name : Automotive Electronics

Semester : 2016-17 ODD
Duration : 3hrs
Max. marks : 100

ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)

Q. No.	Sub Div.	Questions	Course Outcome	Marks
1.	a.	With a block diagram explain the basic sensor arrangement in an automotive system	CO1	20
(OR)				
2.	a.	Explain how the air pressure is sensed in the vehicle. Also discuss about the influence of change in air pressure on the performance of the vehicle	CO2	20
3.	a.	Explain with a neat sketch the following actuators a) Stepper Motor b) Linear Actuator	CO2	20
(OR)				
4.	a.	Elaborate the role of power electronic converters that are used for digitizing the ignition system. Justify the merits of the same	CO1	20
5.	a.	Explain the various components of a starting system with relevant diagram and the principle of operation of a cranking motor	CO1	20
(OR)				
6.	a.	Elaborately comment on the following automotive systems a) ADIS b) ABS	CO3	20
7.	a.	Discuss the various steps that are involved in developing a wireless TPMS. Discuss about the impact of TPMS created over the vehicle performance.	CO3	20
(OR)				
8.	a.	With a neat block diagram explain the operation and advantage of Electronics Steering system	CO3	20
<u>Compulsory:</u>				
9.	a.	Explain the working of fuel metering system with arelevant diagram. How the change in throttle affects the operation of the fuel pump.	CO1	20

ALL THE BEST