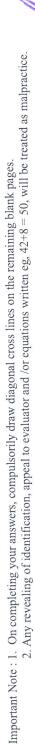
(10 Marks)





Fifth Semester B.E. Degree Examination, June/July 2019 Automotive Electronics

Max. Marks:100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART - A

Explain four stroke SI cycle, with neat sketch.

1	a.	Explain four stroke SI cycle, with heat sketch.	(10 Marks)
	b.	Explain the operation of battery system.	(06 Marks)
	C.	Write a short note on spark plug.	(04 Marks)
2	a.	Explain the operation of fuel delivery system.	(10 Marks)
	b.	Write short notes on:	,
	٠.	i) Exhaust Gas Oxygen sensor (EGO); ii) Hall effect position sensor.	(10 Marks)
		1) Emiliant dus on gen sonsor (Edd), ii) man effect position sensor.	(10111111)
3	a.	Explain the working of fuel metering actuator.	(10 Marks)
3	b.	Explain the operation of evaporative emission system.	(10 Marks)
	υ.	Explain the operation of evaporative clinission system.	(10 Marks)
4	0	Explain the following:	
4	a.	i) Power	
		ii) BSFC	
		iii) TORQUE	
		iv) Thermal efficiency	(10 3 / 1)
	1	v) Calibration	(10 Marks)
	b.	Explain the working operation of digital engine control system, with neat block d	(10 Marks)
			(10 Marks)
		DADT D	
		PART – B	
5	a.	Explain the operation of Controller Area Network, in detail.	(10 Marks)
	b.	Explain the working operation of Global Positioning System, with neat diagram.	(10 Marks)
6	a.	Explain with neat diagram, the working operation of Antilock Braking System.	(10 Marks)
	b.	Explain the working of Electronically Controlled Suspension System.	(10 Marks)
7	a.	Define sampling. Mention the advantages of computer based instrumentation.	(10 Marks)
	b.	Explain the operation of coolant temperature measurement system.	(10 Marks)
			,
8		Write short notes on:	
O	a.	Collision avoidance radar warning system	
	b.	ON – Board diagnostics	
	C.	Low tyre pressure warning system	
	d.	Signpost navigation.	(20 Marks)
	u.	Digipost invigation.	(20 IIIIIII)
			ď.