## GUJARAT TECHNOLOGICAL UNIVERSITY M. E. - SEMESTER – I • EXAMINATION – WINTER • 2014

Subject code: 711107N Date: 05-12			-2014	
Subj	ect N	Name: Automobile Refrigeration and A/C		
Γim€	e: 10	:30 am - 01:00 pm Total Marks	s: 70	
[nsti	ructi	ions:		
		Attempt all questions.		
		Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	~ ·	07	
	<b>(b)</b>	Explain vapour absorption refrigeration system with neat sketch.	07	
Q.2	(a)	Write short note on eco-friendly refrigerants.	07	
	<b>(b)</b>	Explain vapour compression refrigeration with neat sketch. <b>OR</b>	07	
	<b>(b)</b>	Explain properties of automotive refrigerants.	07	
Q.3	(a)		07	
	<b>(b)</b>	Explain effect of air conditioning load on engine performance.  OR	07	
Q.3	(a)		07	
	<b>(b)</b>	Write short note on different types of cooling loads.	07	
Q.4	(a)	1	07	
	<b>(b)</b>	Explain central air conditioning system with neat sketch.  OR	07	
Q.4	(a)	Write short note on refrigeration of transport vehicles.	07	
	<b>(b)</b>	Explain selection criteria for automotive refrigerants.	07	
Q.5	(a)	Explain following:	07	
		(i) Sensible cooling		
	<b>(b)</b>	(ii) Relative humidity	07	
	(D)	Explain in brief types of grills.  OR	07	
Q.5	(a)	Write short note on compressor service.	07	
	(b)	•	07	
	` /	(i) Thermostats		
		(ii) Control dampers		

\*\*\*\*\*