GUJARAT TECHNOLOGICAL UNIVERSITY

ME- SEMESTER II - EXAMINATION - SUMMER 2015

•		Code: 2721106 Date: 30/05/2015	
	e: 2:	Name: Automobile Maintenance & Pollution Control 30 PM – 5:00 PM Total Marks: 70	
instru	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	tools & advanced equipments used in automotive workshops.	07 07
Q.2	(a) (b)	Explain Air Bleeding and Flushing the Steering System. Describe common damages to tyres with their repairs. Give your comments on tyre rotation for vehicle control and safety.	07 07
	(b)	OR Explain the different parameters of wheel alignment with the aid of neat sketch and state its need.	07
Q.3	(a)	What is the function of an engine cooling system? Why is antifreeze solution used in cooling system? State the need for thermostat valve.	07
	(b)	What are the important properties of engine oil and additives? State the different types of additives commonly used.	07
Q.3	(a)	OR Write down the procedure of inspection for lubrication system? Name some anti-	07
	(b)	corrosion agents from lubricating oil of the engine. If engine block temperature indicates above 80°C, list out the possible problems and state its remedy.	07
Q.4	(a)		07
	(b)	Diesel engine. How are they diagnosed and rectified? Explain the maintenance procedure and the various tests to be conducted on a lead acid battery of a vehicle.	07
Q.4	(a)	OR How to carry out analysis of air pollutants which were produced due to automobile	07
ν	(b)	exhaust? Discuss it. State various parameters affecting emission and explain any one control method for automotive pollution control.	07
Q.5	(a) (b)	Discuss potential methods of solid waste disposal. Write a short note on Energy recovery from municipal and Industrial solid waste. OR	07 07
Q.5	(a)	Discuss and differentiate European pollution norms and Indian pollution norms as per Central Motor Vehicle Rules (C.M.V.R.)	07
	(b)	Write a short note on catalytic converter.	07
