Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME SEMESTER II EXAMINATION – SUMMER 2017

Subject Code: 2721106 **Date: 29/05/2017**

Subject Name: Automobile Maintenance & Pollution Control

Time:02:30 PM to 05:00 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Define Engine Tuning. Draw sequential block diagram of engine tune up procedure and explain in brief.	**07**
	(b)	Different major & minor services for engine.	**07**
Q.2	**(a)**	What do you mean by Chassis Dive-line Maintenance? Discuss it.	**07**
	(b)	Why tyre rotation is required? Explain with neat sketch.	**07**
		OR	
	(b)	Describe servicing of hydraulic and air brake system.	**07**
Q.3	**(a)**	Explain different type of battery testing methods.	**07**
	(b)	List different anti-corrosion additives. And explain briefly all.	**07**
		OR	
Q.3	**(a)**	Briefly explain about MPFI maintenance.	**07**
	(b)	What are the important properties of engine oil and additives? State the different types of additives commonly used.	**07**
Q.4	**(a)**	How to carry out analysis of air pollutants which were produced due to automobile exhaust? Discuss it.	**07**
	(b)	State various parameters affecting emission and explain any one control method for automotive pollution control.	**07**
		OR	
Q.4	**(a)**	Define smoke and discuss different factors which affect smoke formation in C.I engines.	**07**
	(b)	Compare the emission from S.I and C.I engines giving proper explanation for the same.	**07**
Q.5	**(a)**	Indian pollution norms as per Central Motor Vehicle Rules (C.M.V.R.)	**07**
	(b)	Energy recovery from municipal and Industrial solid waste.	**07**
		OR	
Q.5	**(a)**	Write a short note on catalytic converter.	**07**
	(b)	Discuss potential methods of solid waste disposal.	**07**

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