C.U.SHAH UNIVERSITY

Winter Examination-2018

Subject Name: Automotive Maintenance and Safety

Subject Code: 4TE05AMS1 Branch: B.Tech (Automobile)

Semester: 5 Date: 03/12/2018 Time: 10:30 To 01:30 Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1		Attempt the following questions:	(14)
	a)	Explain about operation of reamers.	1
	b)	How torque wrench work?	1
	c)	Enlist different types of equipment required for maintenance.	1
	d)	What is function of ignition timing light?	1
	e)	Define reactive maintenance?	1
	f)	What is Passive Safety System in the car?	1
	g)	What are causes for White smoke in diesel engine?	1
	h)	What mean by flushing of cooling system?	1
	i)	What is the purpose of lubricating system in automobile?	1
	j)	Give the name of various leak detection techniques for cooling system.	1
	k)	List different methods of brake bleeding.	1
	l)	Parts of the clutch that should not be cleaned in solvent include the Friction disc cover. True or False?	1
	m)	The condition that causes vapour locking in a brake system is	1
	n)	The Damper fluid leakage typically occurs from Clearance between inner and outer	1
		tubes of damper. True or false?	
Attem	pt any f	Cour questions from Q-2 to Q-8	
Q-2		Attempt all questions	(14)
~ -	a)	Differentiate predictive maintenance and preventive maintenance.	7
	b)	With neat sketch Discuss about various bumper design for safety in detail.	7
Q-3		Attempt all questions	(14)
	a)	With neat sketch explain about wheel Balancing.	7
	b)	Draw and explain vehicle maintenance check sheet used in service stations.	7
Q-4		Attempt all questions	(14)
	a)	What is Cylinder honing? Step-by-step Explain in detail procedure for honing cylinder.	7
	b)	Write a note on air bag system.	7
Q-5		Attempt all questions	(14)
	a)	Explain function and working of exhaust gas analyzer.	7



	b)	List various symptoms and possible faults in diesel injection system.	7
Q-6		Attempt all questions	(14)
	a)	Explain engine assembly procedure in detail.	7
	b)	Explain deformation behavior of vehicle body in detail.	7
Q-7		Attempt all questions	(14)
	a)	Describe common services procedure to be carried out for manual transmission system(gear box)	7
	b)	Explain various leak detection techniques for cooling system in detail.	7
Q-8		Attempt all questions	(14)
	a)	Describe toe adjustment.	7
	b)	How to diagnose oil leak in engine? Explain the prevention techniques for oil leak.	7

