Paper / Subject Code: 53309 / 6) Automobile Engineering

13-Dec-2019 1T01418 - B.E.(MECHANICAL)(SEM VIII) (CBSGS) / 53309 - 6)Automobile Engineering 76951

Time: 3 Hours Marks 80

N.B.

	Question No.1 is compulsory attempt any three out of remaining questions	
	Draw neat sketches to illustrate your answers	
	Figures to the right indicate full marks.	
Q1	With the help of neat sketch explain in brief a) Hotchkiss drive b) Master cylinder c) coil spring front suspensions system d) Alkaline battery	20
Q2	a) Explain in brief, the requirements of body structural system for road vehicle and describe lightweight materials for automobile application.	10
	b) Differentiate between fluid flywheel and torque convertor. Describe any one type of live (rear) axle.	10
Q3	Write Short note on the following	20
	a) Disc Brake	
	b) Necessity of a gearbox	
	c) factors affecting tyre life	
	d) battery ratings	
Q4	a) Enlist the sensors used in modern automobiles with their functions in brief.	10
ζ.	b) Write short note and compare the semi integral and integral structures and state application.	10
Q5	a) Explain the construction, working, advantages and disadvantages of multi plate dry friction clutch.	10
	b) What are the objectives of suspension? Describe telescopic type shock absorber.	10
Q6		10
	b) Discuss three modern trends in automobiles with their features and advantages.	10
