Reg. No. : | | | | | | | | | | |

Question Paper Code: 94705

B.E./B.Tech. DEGREE EXAMINATION, NOV 2023

Fourth Semester

Mechanic Engineering

19UME405 - AUTOMOBILE ENGINEERING

(Regulation 2019)

Duration: Three hours | Maximum: 100 Marks

PART A - (10 x 2 = 20 Marks)

Answer Any ten of the following Questions

1.	Explain the term Chassis	CO1- U
2.	Explain the Sensor?	CO1- U
3.	Why is the frame narrow at front?	CO1- U
4.	Why you need a gearbox?	CO2- U
5.	List the functions of a gearbox?	CO1- U
6.	Define the Electronic ignition system?	CO2- U
7.	List out the different types of wheels?	CO3- U
8.	Distinguish between disc brake with drum brake	CO3- U
9.	List out the benefits of anti-lock brake system?	CO3- U
10.	Explain the fuel cell?	CO4- U
11.	Explain about alternative fuels?	CO4- U
12.	List the types of fuelcell?	CO4- U
13.	List out the Features of IoT	CO5- U
14.	State the characteristics of IoT.	CO5- U
15	Compare the Logical and physical design of IoT	CO5- U

PART – B (5 x 16= 80 Marks)

11.	(a)	Explain the construction of Piston and piston rings with neat sketch	CO1- U	(16)

Or

	(b)	Describe the construction of various types of chassis used in automobile with neat sketch	CO1- U	(16)
12.	(a)	Explain the working of Electronic Injection System with neat sketches	CO2- U	(16)
		Or		
	(b)	Outline the Principle of Friction clutch?	CO2- U	(16)
13.	(a)	Explain the working of Power Steering system with neat sketches	CO3- U	(16)
		Or		
	(b)	Explain the working of Suspension system with neat sketches	CO3- U	(16)
14.	(a)	Explain the Emission norms and emission control techniques	CO4-U	(16)
		Or		
	(b)	Discuss about the use of biodiesel in automobile?	CO4-U	(16)
15.	(a)	Explain in detail about the electrical vehicle system with a block diagram	CO5-U	(16)
		Or		
	(b)	Explain the Biometric vehicle access System in Automobile?	CO5-U	(16)