

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2181915****Date:09/05/2019****Subject Name:Automobile Engineering****Time:10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

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

		MARKS
Q.1	(a) What is automotive system? Classified the vehicle with respect its body types.	03
	(b) Explain function of frame.	04
	(c) List the different component which included in chassis. Classified the chassis and explain functions of chassis.	07
Q.2	(a) Write down the classification clutch.	03
	(b) Draw the layout of transmission system.	04
	(c) Explain semi centrifugal clutch working with neat sketch.	07
	OR	
	(c) Explain constant mesh gear box working with neat sketch.	07
Q.3	(a) Write down the function of clutch	03
	(b) Explain any two troubleshooting related to brake	04
	(c) Explain brake bleeding process.	07
	OR	
Q.3	(a) Define (1) Camber (2) Caster (3) Toe	03
	(b) What is wheel balancing? Explain requirement of wheel balancing.	04
	(c) Explain double wishbone suspension system.	07
Q.4	(a) Give classification of suspension system.	03
	(b) Write down function of suspension system.	04
	(c) Explain Ackermann steering mechanism.	07
	OR	
Q.4	(a) Give the function of 1) Stabilizer bar 2) Tie rod 3) Shackle	03
	(b) Explain tire construction with neat sketch	04
	(c) Explain Antilock Braking System in detail.	07
Q.5	(a) List the different electrical components used in automobile system.	03
	(b) List the various electronic components used in automobile system.	04
	(c) Draw and explain the electric system layout for modern car.	07
	OR	
Q.5	(a) Explain recent trends with modern vehicle.	03
	(b) What is wheel alignment? Write down its important for vehicle.	04
	(c) Write the short notes on hybrid car	07
