

Enrollment No: _____

Exam Seat No: _____

C. U. SHAH UNIVERSITY

Winter Examination-2019

Subject Name : Two and Three Wheel Technology

Subject Code : 4TE07TWT1

Branch: B.Tech (Automobile)

Semester : 7

Date : 20/11/2019

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.
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Q-1 Attempt the following questions:

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|--|---|
| a) Define: Motor cycle | 1 |
| b) Give the full name of CVT. | 1 |
| c) Write use of Throttle position sensor. | 1 |
| d) Give the classification of engine with respect to cooling system. | 1 |
| e) What is Twin Spar frame? | 1 |
| f) Define: Clutch | 1 |
| g) Write type of handle bar. | 1 |
| h) What are the characteristics for selection of brake friction material? | 1 |
| i) Define: Structural efficiency. | 1 |
| j) Aerodynamic drag depends on..... | 1 |
| k) Write technical specification of TVS XL. | 1 |
| l) Write materials used in alloy wheels. | 1 |
| m) Give the name of three wheelers based on wheel configuration. | 1 |
| n) Give the name of gearbox of two wheelers based on automatic transmission. | 1 |

Attempt any four questions from Q-2 to Q-8

Q-2 Attempt all questions

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| a) Describe layout of motorcycle with neat sketch. | 07 |
| b) Explain- various type of tubular frame. | 07 |

Q-3 Attempt all questions

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|--|----|
| a) Explain symmetric and asymmetric port timing diagrams for two stroke engine with neat sketch. | 07 |
| b) Explain construction and working of kick start mechanism. | 07 |

Q-4 Attempt all questions

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|--|----|
| a) Explain construction and working of single plate clutch with neat sketch. | 07 |
|--|----|



	b)	Explain with neat diagram: single link type front suspension system.	07
Q-5		Attempt all questions	
	a)	Write technical specification of Moped.	05
	b)	Compare various type of wheels used in two wheelers.	05
	c)	Compare tube and tubeless tyres.	04
Q-6		Attempt all questions	
	a)	Classify Three Wheeler.	07
	b)	Draw and explain drive train layout of passenger auto rickshaw.	07
Q-7		Attempt all questions	
	a)	What is the function of lubrication? Why it is necessary?	05
	b)	Explain importance of a battery.	05
	c)	Briefly explain basic system used to build a two wheeler.	04
Q-8		Attempt all questions	
	a)	Describe the arrangements for foot operated mechanical brake.	07
	b)	Explain construction of twin-spar frame.	07

