Enrollment No: Exam S	eat No:
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C.U.SHAH UNIVERSITY

Winter Examination-2018

Subject Name: Two and Three Wheeler Technology

Subject Code: 4TE07TWT1 Branch: B.Tech (Automobile)

Semester: 7 Date: 04/12/2018 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)
V -	a)	What is the use of reed valve in a two stroke petrol engine?	1
	b)	Why centrifugal clutch is used in mopeds?	1
	c)	What is ply rating?	1
	d)	What do you understand by DTS-i?	1
	e)	How many cells are used in a 12 volt car battery?	1
	•	(A) 2	-
		(B) 4	
		(C) 6	
		(D) 8	
	f)	In a single dry plate clutch, torsional vibrations are absorbed by	1
	-)	(A) Coil springs known as torsional springs	_
		(B) Cushion springs	
		(C) Central hub	
		(D) Clutch pedal	
	g)	Damper is also known as	1
	5 /	(A) Shock absorber	
		(B) Torsion bar	
		(C) Spring	
		(D) Radius rod	
	h)	The basic purpose of tyres is to	1
		(A) Grip the road and provide good traction	
		(B) Substitute for springs	
		(C) Act as brake	
		(D) None of these	
	i)	In a ventilated disc brake	1
		(A) A duct directs air towards the caliper for cooling while the vehicle is moving	
		(B) Caliper is covered with cooling fins	
		(C) Disc contains many small holes for optimum cooling performance	
		(D) Disc contains radial vanes between its rubbing surfaces for optimum cooling	
		performance	
	j)	Which part of the automobile tyre is subjected to greatest flexing action?	1



		(A) Bead	
		(B) Side wall	
		(C) Shoulder	
		(D) Tread	
	k)	The ignition coil is used to	1
)	(A) Step up current	_
		(B) Step down current	
		(C) Step up voltage	
	1)	(D) Step down voltage	1
	1)	The starting system includes	1
		(A) A battery, a starter, and an ignition switch	
		(B) A battery, a distributor, and an ignition switch	
		(C) A battery, a starter, and a distributor	
		(D) A distributor, a starter, and an ignition switch	
	m)	The most accurate ignition system of a spark ignition engine is	1
		(A) Magneto system	
		(B) Battery system	
		(C) Electronic control unit system	
		(D) Magneto and electronic system	
	n)	The negative terminal post on the top of a battery is	1
	,	(A) Smaller than the positive terminal post	
		(B) Larger than the positive terminal post	
		(C) Of the same size as the positive terminal post	
		(D) None of these	
∆ ttem	nt anv f	our questions from Q-2 to Q-8	
1000111	pt any 1	our questions from Q 2 to Q o	
Q-2		Attempt all questions	(14)
Q- <u>2</u>	(A)	What are the advantages of TATA ACE over Ashok Leyland pick up van?	7
	(\mathbf{A})	· · · · · · · · · · · · · · · · · · ·	,
	(D)	Explain it.	7
	(B)	Write technical specification of any one two wheelers.	7
Q-3		Attempt all questions	(14)
	(A)	Explain briefly about the construction and working of kick starter mechanism.	7
	(B)	Explain with neat sketch SNS suspension system.	7
Q-4		Attempt all questions	(14)
	(A)	Explain construction of drum brake used in two wheelers.	7
	(B)	Write case study of any one Hero Honda motorcycles.	7
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Q-5		Attempt all questions	(14)
Q- 3	(4)	Write case study of any one Bajaj Auto rickshaws.	7
	(A)		=
	(B)	Explain with neat sketch any one fuel system of two wheelers.	7
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Q-6	(4)	Attempt all questions	(14)
	(A)	Only draw goods and passengers layouts with its nomenclature.	7
o -	(B)	Sketch and explain the scavenging processes used in two wheeler engine.	7
Q-7		Attempt all questions	(14)
	(A)	Sketch the multi plate wet clutch used in a scooter and explain its working.	7
	(B)	Draw cut sectional view of a gear box used in two wheelers and its working in	7
		detail.	



Q-8		Attempt all questions	(14
	(A)	Compare tube and tubeless tyre.	7
	(B)	With the aid of sketches explain an Anti-lock braking system used in two wheelers.	7

