## Paper / Subject Code: 42855 / Automobile Engineering (DLOC - III)

22-Nov-2019 1T01427 - B.E (Mechanical Engineering) (SEM-VII)(Choice Base) / 42855 - Automobile Engineering (DLOC - III) 76827

	(3Hrs)	80 Marks
N.B.:	<ul> <li>(1) Question No. 1 is compulsory.</li> <li>(2) Attempt any 3 questions out of 5 questions.</li> <li>(3) Figures to the right indicate full marks.</li> <li>(4) Ulvatrate years pressure with electrons whenever processors.</li> </ul>	
	(4) Illustrate your answers with sketches wherever necessary.	The state of the s
Q.1	Attempt any four from following six questions	20
<b>a</b> )	Explain the requirements of Clutches.	05
<b>b</b> )	Explain the working of differential with sketch.	05
c)	Explain the difference between sprung and un-sprung mass.	05
d)	Explain various battery ratings.	05
e)	Explain the importance of body design.	05
<b>f</b> )	Explain what do you mean by adaptive cruise control.	05
		6 S S Y V V V S S A A
<b>Q.2</b>		20
<b>a</b> )	Explain synchromesh gearbox with sketch.	10
<b>b</b> )	Explain types of universal joint in detail.	10
$\Omega$		2000
Q.3	Evaloin stooring geometry in detail	20
a)	Explain steering geometry in detail.	10
<b>b</b> )	Explain air suspension and its feature in detail.	10
Q.4		20
a)	Explain types of live axle with sketches.	10
<b>b</b> )	Explain different brake actuation methods.	05
<b>c</b> )	Explain overdrive.	05
0.5		20
Q.5	Evaloin the weeking of lead soid bottom, with next alcotab	10
a) b)	Explain the working of lead acid battery with neat sketch.  Explain reversibility of steering gears.	05
c)	Explain working of combine current and voltage regulator.	05
C)	Explain working of combine current and voltage regulator.	03
Q.6	Attempt any four from following six questions	20
<b>a</b> )	Explain the working of electronic brake distribution with neat sketch.	05
<b>b</b> )	Explain open, semi-integral and integral structure with neat sketch.	05
<b>c</b> ) §	Explain bendix drive in detail.	05
<b>d</b> )	Explain principle operation of dynamometer in detail with diagram.	05
<b>e</b> )	Explain different types of tyres.	05
<b>f</b> )	Explain the difference between disc and drum brake.	05

\*\*\*\*\*\*\*