Seat No.:	Enrolment No.
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Subject Code: 180203

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## **BE - SEMESTER-VIII EXAMINATION - SUMMER 2016**

Date: 18/05/2016

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Subject Name: Special Purpose Vehicles Time: 10:30 AM to 01:00 PM Instructions: 1. Attempt all questions.		: 70	
		Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Write the special features of tractor. Explain working of Electric vehicle with diagram.	07 07
Q.2	(a) (b)	List the various types of excavators and explain any one excavator in detail.  Explain braking system of tractor with neat sketch.  OR	07 07
	<b>(b)</b>	Write short note on tracked vehicle.	07
Q.3	(a) (b)	Discuss about design consideration of final drive in special purpose vehicle.  Draw sketch of tripper and explain its working and purpose.	07 07
Q.3	(a)	OR Short note on Fifth wheel arrangement of semi trailer truck.	07
•	<b>(b)</b>	Write short note on instrumentation applied for special purpose machines.	07
Q.4	(a)	Explain wheel loader with its applications. what types of attachments can be extended to a wheel loader?	07
	<b>(b)</b>	Explain the working of lubrication system of special purpose vehicle with neat sketch.	07
		OR	
Q.4	(a) (b)	List the types of crane and explain characteristic of truck crane. How Multi axle vehicles differ from conventional vehicles, Discuss in detail.	07 07
Q.5	(a) (b)	Discuss about Solar vehicles used for special purpose with neat sketch.  Classify special purpose vehicle and give application.  OR	07 07
Q.5	(a)	Explain types of hydrodynamic steering system used in special purpose vehicle with examples.	07
	<b>(b)</b>	Explain the design consideration and performance parameters of an Innovative Special Purpose Vehicle.	07

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