Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITYBE - SEMESTER-VIII • EXAMINATION – SUMMER 2013

Subject Code: 180203 Date: 13/05/2013

Subject	Name	Special	Purpose	Vehicles
Subject	name:	Special	Purbose	venicies

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.

Q.1	(a) (b)	Classify the special purpose vehicle giving application of each. Explain Basic Crane unit with different crane attachment.				
Q.2	(a) (b)	Explain hydraulic system of tractor with neat sketch. Explain the bucket wheel excavator with its main parts. Write the advantages of the bucket wheel excavator.	07 07			
	(b)	OR List and explain the various implements used with tractor.	07			
Q.3	(a) (b)	Explain Forklift operation techniques with its use. Explain Safety consideration during crane operations. OR	07 07			
Q.3	(a) (b)	Explain Track-Mounted Excavator in detail. Write a short note on wheel loader with its applications.	07 07			
Q.4	(a) (b)	Explain gear box used in tractor with neat sketch. List the types of crane and explain truck crane in detail. OR	07 07			
Q.4	(a)	How the power shovel is selected? Write the factors which affect the output of a power shovel.	07			
Q.4	(b)	Write short note on tracked vehicle & articulated vehicle.	07			
Q.5	(a) (b)	Classify and explain multi axle vehicles. List types of Hybrid Vehicles and explain gas turbine engine. OR	07 07			
Q.5	(a)	List the main components of an electric vehicle and give the advantages and disadvantages of an electric vehicle.	07			
	(b)		07			
