Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER– IV(NEW) EXAMINATION – SUMMER 2015

Subject Code:2141309 **Date:08/06/2015**

Subject Name: Soil and water Conservation Engineering

Time: 10:30am-1.00pm **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)**	Define Soil Erosion. Enlist & Explain different types of Soil Erosion.	07
	(b)	Enlist the type of different soil Erosion control methods & Explain any one in detail.	07
Q.2	**(a)**	Write a short note on check dam along with a neat sketch.	07
	(b)	Explain the causes of soil erosion.	07
		OR	
	(b)	Explain water Conservation.	07
Q.3	**(a)**	Define the following terms: 1) Rainfall 2) Runoff 3) water harvesting 4) Aquifers 5) Infiltration 6) Reservoir 7) Evaporation	07
	(b)	Explain in Brief: Ground Water recharge through wells.	07
		OR	
Q.3	**(a)**	Define Water loss. Explain the Different types of Water losses.	07
	(b)	Discuss: pollution/ Contamination of water quality due to agricultural practices.	07
Q.4	**(a)**	Explain Soil erosion due to wind and its control.	07
	(b)	Explain Flood plain zone management.	07
		OR	
Q.4	**(a)**	Write a short note on reducing the impact of flooding.	07
	(b)	What is soil conservation? Explain the scope of soil conservation in detail	07
Q.5	**(a)**	Write down the 'universal soil loss equation' & explain it.	07
	(b)	Write a short note on Grass land management.	07
		OR	
Q.5	**(a)**	How can soil Erosion be controlled using biological method?	07
	(b)	Write a short note on Soil Quality management.	07

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