

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-V (NEW) EXAMINATION – WINTER 2018****Subject Code:2153508****Date:20/11/2018****Subject Name:Environmental Management-I****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.

		MARKS
Q.1	(a) Define: EMS, Management Audit and Activity Audit	03
	(b) What are the core elements of EMS?	04
	(c) Explain documentation of EMS in detail?	07
Q.2	(a) List the types of Environmental Audit?	03
	(b) What are the benefits of environmental audit?	04
	(c) Explain energy audit in detail?	07
	<b>OR</b>	
	(c) Explain comprehensive audit in detail?	07
Q.3	(a) What is land use pattern?	03
	(b) Define Water reuse, recycle and reduce techniques.	04
	(c) Explain air cleaning techniques in detail.	07
	<b>OR</b>	
Q.3	(a) What is water terminology?	03
	(b) Explain Merits and demerits of bioremediation.	04
	(c) Explain zero liquid discharge in detail?	07
Q.4	(a) Define RO system with figure?	03
	(b) Explain types of bioremediation?	04
	(c) Explain MEE in detail?	07
	<b>OR</b>	
Q.4	(a) Define and explain hydrological cycle?	03
	(b) Explain the sources of water?	04
	(c) Explain precipitation in detail?	07
Q.5	(a) What is water audit?	03
	(b) Explain difference between ISO14001 and OHSAS 18001?	04
	(c) Explain REACH in detail?	07
	<b>OR</b>	
Q.5	(a) Explain ISO14000?	03
	(b) Explain pre inception and post inception ?	04
	(c) Explain water economy in detail?	07

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