Seat No.:	Enrolment No.
Deat 110	<b>Em oment</b> 100

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-IV (NEW) - EXAMINATION - SUMMER 2017

Subject Code: 2141308 Date: 12/06/2017

**Subject Name: Environmental Resources** 

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	1 2 3	Name the Conventional Fossil Fuels.				
	4	Water expands by % when it freezes.				
	5	Classify the Off-stream use of Water?				
	6 7 8 9 10 11 12 13 14	Static Reserve Index is used for what purpose? Give examples of alternative sources of energy used in India? Explain the term Population Profile. Define the term Overgrazing. Give any one consequence of overgrazing. Define GNP. Enlist the types of forest. Write down equation for instantaneous rate of increase of Population. Explain the term Fresh Water. Define the term Population Explosion.				
Q.2	(a) (b) (c)	Write a short note on Carbon Footprint. Identify sources of food. Explain them in short. What are the causes of desertification? Also highlight consequences due to desertification.	03 04 07			
		OR				
	(c)	How can we conserve water at home? Highlight at least 12 points.	07			
Q.3	(a) (b)	Highlight the role of CO <sub>2</sub> in global warming.  Differentiate between climate change, global warming and green house effect.	03 04			
	(c)	Enlist and explain the steps to be taken to protect Biodiversity.  OR	07			
Q.3	(a) (b)	Discuss the concept of doubling time of population with one example.  Which are the main approaches used to determine value of biological resources? Explain them in short.	03 04			
Q.4	(c) (a)	What are the purposes, components and advantages of social forestry?  Define Recycling and Reuse. Give one example of each for industry.	07			

	<b>(b)</b>	Give difference between Renewable and Non-renewable energy resources.							
	(c) Write a short note on Tidal Energy. Highlight its advantages disadva								
		and potential	of its use.					_	
		-			OR				
Q.4	(a)	Justify the statement "Polluter Pay Principle".						03	
	( <b>b</b> )	•						04	
	( )	r = rate of increase of population							
		b= birth rate							
		d= death rate							
	(c)			nario which	n alternative	e energy so	urce has m	ore <b>07</b>	
	(c) Looking at present scenario which alternative energy source has more potential? Justify your answer.								
		<b>r</b>	<i>y y x</i>						
0.5	(-)	<b>W</b>		4 1:	- C1 - 4:			02	
Q.5	(a)						03 and 04		
(b) Give difference between Malthusian theory of maximum Population									
		Optimum Population theory.					. –		
	<b>(c)</b>	tection of cr	ops <b>07</b>						
		and food							
					OR				
Q.5	(a)	Enlist any thi						03	
	<b>(b)</b>	11					04		
	<b>(c)</b>	The population statistics pertaining to a town are given below. Estimate the <b>0</b>							
population expected in 1980 by arithmetical and geometrical increase								ase	
		method.							
		Year	1930	1940	1950	1960	1970		
		Population	70,000	1,00,000	1,50,000	2,00,000	2,40,000		

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