2055

B.E. (Information Technology) Sixth Semester

HSMC-601: Environmental Sciences

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

- 1. Answer in brief:-
 - (a) Which Indian state is known for the successful implementation of the watershed . management program?
 - (b) The 2016 national forest policy aims to bring how much of India's total geographical area under forest cover.
 - (c) What is the day time noise limit for a residential zone, as per noise pollution rules of India?
 - (d) Which organization is responsible for monitoring environmental standards and pollution control in India?
 - (e) Which Indian state implemented the "Pani Bachao, Paise Kamao" (save water, Earn Money) scheme to conserve water?
 - (f) What is the minimum thickness of plastic carry bags as stipulated by the Plastic Waste Management Rules, 2016?
 - (g) Can an ecosystem regulate itself.
 - (h) Mention the unit of measurement of noise intensity level.
 - (i) Differentiate between pollution prevention and pollution control.
 - (j) What is BOD used to measure?

(10x1)

UNIT - I

- 2. a) Compare the flow of energy and nutrients through an ecosystem. (3)
 - b) Explain the role of producers, consumers and decomposers in an ecosystem. (3)
 - c) What is an ecological pyramid? Differentiate between pyramid of number, biomass and energy. (4)

3.	a) Write a note on particulate air pollutants mentioning their chemical composition.	
	b) What are major physiological effects of air pollution on plants?	(2x5)
4.	a) What are the objectives of Environmental Impact Assessment?	
	b) What are the main causes of Environmental degradation?	(2x5)
	<u>UNIT - II</u>	
5.	a) What are the detrimental effects of toxic metals present in water?	
	b) What are the permissible limits of the following for drinking water?	
	(i) pH (ii) total dissolved solids (iii) chlorides (iv) hardness (v) fluorides.	(2x5)
6.	a) Differentiate between composting and vermicomposting.	(3)
	b) List the methods of disposal of hazardous waste.	(4)
	c) Compare incineration and landfilling in the case of hospital waste.	(3)
7.	a) What is the frequency range for hearing the sound by human ear?	(2)
	b) What are the impacts of noise on human beings?	(4)
	c) Explain the concept of source and path receiver in the control of noise p	
		(4)
	<i>x-x-x</i>	