



**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY: PUTTUR
(AUTONOMOUS)**

Subject with Code: Environmental Science(23HS0805)

Branch: B. Tech- COMMON TO ALL

Year & Sem: II-B. Tech ISEM

Regulation: R23

QUESTION BANK

UNIT-I

NATURAL RESOURCES

1.	Define Environment. Explain Multidisciplinary nature of Environmental studies.	[CO1][L1][10M]
2.	(a)Discuss Scope and Importance of Environmental studies.	[CO1][L2][5M]
	(b) Explain the need of public awareness towards environment.	[CO1][L1][5M]
3.	(a)Differentiate Renewable and non-renewable resources with examples.	[CO1][L3][5M]
	(b) What are the uses of forest?	[CO1][L1][5M]
4.	(a) What are the major causes of deforestation? What are the effects of deforestation on Environment?	[CO1][L1][5M]
	(b) Discuss briefly droughts and floods.	[CO1][L2][5M]
5.	Define Aquifer. Discuss its types with the diagram.	[CO1][L1][10M]
6.	What are major causes for conflicts over water? Discuss one international and One inter-state water conflict.	[CO1][L2][10M]
7.	What are the uses of minerals and discuss the major environmental impacts of mineral extraction.	[CO1][L2][10M]
8.	Explain impacts on Overgrazing and Agriculture.	[CO1][L1][10M]
9.	(a) Give an account on Solar energy, Wind energy, and Tidal Energy.	[CO1][L1][6M]
	(b) Write a brief note on Nuclear Energy.	[CO1][L2][4M]
10.	Discuss the use and over exploitation of water resources. Give an account on uses and exploitation of Minerals.	[CO1][L2][10M]

UNIT-II

ECOSYSTEMS AND BIODIVERSITY

1.	Describe the structure and functions of an Ecosystem.	[CO2][L1][10M]
2.	(a)Discuss the models of Energy flow in an Ecosystem.	[CO2][L2][5M]
	(b) Explain Food chain and its types.	[CO2][L1][5M]
3.	Explain various processes involved in Ecological succession.	[CO2][L1][10M]
4.	(a)Write a short note on Ecological pyramids.	[CO2][L2][6M]
	(b) Write about Food web.	[CO2][L2][4M]
5.	Explain the different types in aquatic ecosystem and desert ecosystem.	[CO2][L1][10M]
6.	Define Biodiversity. Explain Genetic diversity, Species diversity & Ecosystem diversity.	[CO2][L1][10M]
7.	Discuss the values of Biodiversity.	[CO2][L2][10M]
8.	Explain Bio-geographical classification of India.	[CO2][L1][10M]
9.	(a)Define hotspot of Biodiversity.	[CO2][L1][2M]
	(b)What are the hotspots found in India? Discuss their salient Features.	[CO2][L2][8M]
10.	What is Red Data Book? Give a brief account on In-situ and ex-situ conservation.	[CO2][L2][10M]

UNIT-III

ENVIRONMENTAL POLLUTION

1.	Define Air pollution. Explain its causes, effects and control measures of Air pollution.	[CO3][L1][10M]
2.	Explain in detail about Water pollution causes, effects and control measures of water pollution.	[CO3][L1][10M]
3.	What are environmental effects due to soil pollution and explain its causes and remedial measures.	[CO3][L2][10M]
4.	(a) Define Noise pollution.	[CO3][L1][2M]
	(b) write its causes, effects and control measures.	[CO3][L2][8M]
5.	How can you, as an individual, prevent environmental pollution? Why such an effort at Individual level is important?	[CO3][L3][10M]
6.	What do you understand by Thermal pollution? Discuss various effects and control measures of thermal pollution.	[CO3][L2][10M]
7.	Define radioactivity. Mention the sources and effects of radioactivity.	[CO3][L1][10M]
8.	Classify solid waste. What adverse effects can solid waste can cause? How can a solid waste be managed?	[CO3][L2][10M]
9.	(a) Write a short note on Bhopal gas tragedy	[CO3][L2][5M]
	(b) Give an account on Chernobyl nuclear disaster.	[CO3][L1][5M]
10.	Give an account on Earthquake, Floods and Cyclones.	[CO3][L1][10M]

UNIT-IV

SOCIAL ISSUES AND THE ENVIRONMENT

1.	What do you mean by Sustainable development? What are major measures to attain sustainability?	[CO4][L1][10M]
2.	(a) What is rainwater harvesting? Write the objectives of rainwater harvesting.	[CO4][L2][5M]
	(b) Discuss on Traditional and Modern rainwater harvesting techniques.	[CO4][L2][5M]
3.	What is watershed? Critically discuss the objectives and practices of Watershed management.	[CO4][L2][10M]
4.	Write a short note on	[CO4][L1][5M]
	(a) Global warming	
	(b) Acid rains	[CO4][L2][5M]
5.	Discuss the natural formation and occurrence of ozone in the Stratosphere.	[CO4][L3][10M]
6.	Discuss various measures for wasteland reclamation.	[CO4][L2][10M]
7.	Write a critical note on nuclear holocaust and ozone layer depletion.	[CO4][L2][10M]
8.	Give a brief note on consumerism and waste products.	[CO4][L2][10M]
9.	(a) Discuss the salient features of Wildlife (Protection) Act, 1972.	[CO4][L2][5M]
	(b) Discuss various provisions for Forest (Conservation) Act, 1980.	[CO4][L2][5M]
10.	(a) Discuss the Major Environmental Protection Rules, 1986.	[CO4][L2][5M]
	(b)What are the salient features of Water (Prevention and Control of Pollution) Act, 1974.	[CO4][L2][5M]

UNIT-V

HUMAN POPULATION AND THE ENVIRONMENT

1.	Write a note on Population growth? What are the factors influencing population size?	[CO5][L2][10M]
2.	What do you mean by (a) Doubling time (b) Total Fertility Rate (c) Zero Population Growth (d) Life Expectancy (e) Replacement level	[CO5][L2][10M]
3.	(a)What is meant by ‘Population Explosion’?	[CO5][L2][5M]
	(b)Discuss the Family welfare and Family planning program.	[CO5][L2][5M]
4.	Discuss the influence of environmental parameters and pollution on human health.	[CO5][L2][10M]
5.	Discuss the salient features of draft Declaration of Human Rights and Environment.	[CO5][L2][10M]
6.	Briefly discuss Value Education.	[CO5][L2][10M]
7.	Briefly discuss HIV/AIDS, mode of its spread and its effects on environment.	[CO5][L2][10M]
8.	Discuss various issues and measures for women and child welfare at international and national level.	[CO5][L2][10M]
9.	Discuss the role of Information Technology in Environment and human health.	[CO5][L2][10M]
10.	Prepare a field report of the visit of a hill site.	[CO5][L2][10M]