#### SIDDHARTH INSTITUTE OF ENGINEERNG & TECHNOLOGY :: PUTTUR (AUTONOMOUS)

Subject with Code : Environmental Science(20HS0801) Branch : B.Tech – CSE,CAD,CSM,CIC,CAI,CCC,CE,AGE. Year & Sem : III-B.Tech & II-Sem

. Regulation : R20

#### UNIT-I

**QUESTION BANK** 

# MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES <u>AND</u> <u>NATURAL RESOURCES</u>

1.	Explain the need of public awareness towards environment.	[L2][1 <b>0M]</b>
2.	Discuss Multidisciplinary Nature of Environmental studies.	[L2][ <b>10M]</b>
3.	(a) Differentiate Renewable and non renewable resources with examples	[L4][ <b>5M]</b>
	(b) What are the uses of forest?	[L1][ <b>5M]</b>
4.	(a) What are the major causes of deforestation?	[L1][ <b>5M]</b>
	(b) What are the effects of deforestation on Environment?	[L1][ <b>5M]</b>
5.	(a) Discuss briefly droughts and floods.	[L2][ <b>5M]</b>
	(b) Discuss the use and over exploitation of water resources.	[L2][ <b>5M]</b>
6.	What are major causes for conflicts over water? Discuss one international and	
	One inter - state water conflict.	[L2][ <b>10M]</b>
7.	Discuss the major environmental impacts of mineral extraction.	[L1][ <b>10M]</b>
8.	(a) What are the uses of minerals and it's Exploitation?	[L1][ <b>5M]</b>
	(b) Write a brief note on Nuclear Energy.	[L1][ <b>5M]</b>
9.	Summarise on solar energy, wind energy and Hydropower Energy resources.	[L2][10M]
10.	Explain what is Environment and how we survive with the uses of good environment.	[L2][10M]

### <u>UNIT-II</u>

## **ECOSYSTEM**

1.	Define ecosystem and explain in detail about ecosystem.	[L1][ <b>10M]</b>
2.	Describe the structure and functions of an Ecosystem.	[L3][ <b>10M]</b>
3.	What are Ecological pyramids? Explain different types of ecological pyramids with neat	
	Sketch.	[L2][ <b>10M</b> ]
4.	(a) Discuss the models of Energy flow in an Ecosystem.	[L2][ <b>5M]</b>
	(b) What are biogeochemical cycles? Explain with the help of a diagram the nitrogen	
	Cycle.	[L2][ <b>5M]</b>
5.	Explain the following	
	(a) Food chains	[L2][ <b>3M</b> ]
	(b) Food web	[L2][ <b>3M</b> ]
	(c) Ecological pyramids	[L2][ <b>4M]</b>
6.	Explain various processes involved in Ecological succession.	[L2][ <b>10M</b> ]
7.	What is the nature of grassland ecosystem? Explain its structure and function.	[L1][ <b>10M]</b>
8.	Explain the structural components of desert and lake ecosystem.	[L2][ <b>10M</b> ]
9.	(a) Define food chain. Write its types.	[L1][ <b>5M]</b>
	(b) Explain the structure and functional components of forest ecosystem.	[L2][ <b>5M]</b>
10.	Explain the different types in aquatic ecosystem.	[L2][ <b>10M</b> ]

#### <u>UNIT-III</u>

#### **BIODIVERSITY AND ITS CONSERVATION**

1.	Discuss the values of bio diversity.	[L2][ <b>10M]</b>
2.	Define Biodiversity. Explain Genetic diversity, Species diversity & Ecosystem diversity.	[L2][ <b>10M]</b>
3.	Write a brief note on Indian diversity with special reference as a mega diversity nation.	[L1][ <b>10M]</b>
4.	Explain Bio-geographical classification of India.	[L2][ <b>10M]</b>
5.	Discuss the following	
	(a) Social value.	[L2][ <b>2M]</b>
	(b) Ethical Value.	[L2][ <b>2M]</b>
	(c) Aesthetic value.	[L2][ <b>2M]</b>
	(d) Optional value.	[L2][ <b>2M]</b>
	(e) Ecosystem service value.	[L2] <b>[M]</b>
6.	(a) Define hotspot of bio diversity.	[L1][ <b>2M]</b>
	(b) Which are the hotspots found in India? Discuss their salient Features.	[L1][ <b>8M]</b>
7.	What are the major threats to Biodiversity?	[L1][ <b>10M]</b>
8.	Summarise the following	
	(a) Endangered species.	[L2][ <b>5M]</b>
	(b) Endemic species.	[L2][ <b>5M]</b>
9.	What is mean by In-situ and Ex-situ conservation of Biodiversity? Give examples.	[L1][ <b>10M]</b>
10	. What is Red Book Data? What do you mean by Extinct, Endangered, Vulnerable and	
	Rare Species? Name some Extinct Species of plant & animals of our country.	[L1][ <b>10M]</b>

#### <u>UNIT-IV</u> <u>ENVIRONMENTAL POLLUTION AND GLOBAL ENVIRONMENTAL ISSUES</u>

1.	Define Air pollution. Explain its causes, effects and control measures of Air pollution.	[L1] <b>10M</b>
2.	Elaborate on	
	(a) Water pollution.	[L2][ <b>5M]</b>
	(b) Land pollution.	[L2][ <b>5M]</b>
3.	(a) What is an earth quake? Write its effects.	[L1][ <b>5M]</b>
	(b) Write short notes Landslides.	[L1][ <b>5M]</b>
4.	Discuss the natural formation and occurrence of ozone in the Stratosphere.	[L2][ <b>10M]</b>
5.	Explain the following	
	(a) Acid rains.	[L2][ <b>5M]</b>
	(b) Global warming	[L2][ <b>5M]</b>
6.	Define noise pollution. Explain its causes, effects and control measures of noise	
	Pollution.	[L1][ <b>10M]</b>
7.	Write short notes on	
	(a) Droughts and floods	[L1][ <b>6M]</b>
	(b) Cyclones	[L1][ <b>4M]</b>
8.	How can you, as an individual, prevent environmental pollution? Why such an effort at	
	Individual level is important?	[L2][ <b>10M]</b>
9.	(a) What is solid waste management? Explain its causes and effects.	[L1][ <b>6M]</b>
	(b) Write a short note on control measures of solid waste management.	[L1][ <b>4M]</b>
10	• Write a note on Population growth? What are the factors influencing population size?	[L1][ <b>10M]</b>

#### UNIT-V

#### **ENVIRONMENTAL LEGISLATION, LAWS, POLICES FOR SUSTAINABLE DEVOLOPMENT**

1.	Discuss the salient features of forest conservation Act and Wild life (protection) Act.	[L2][ <b>10M</b> ]
2.	Describe Air (Prevention and control of pollution) Act and Environment (Protection)	
	Act.	[L3][ <b>10M</b> ]
3.	What is the role of Information technology in Environment and human health?	[L1][ <b>10M</b> ]
4.	(a) What is the role of Information technology in Environment and human health?	[L1][ <b>5M]</b>
	(b) Discuss the impact of increase of pollution on environment.	[L2][ <b>5M]</b>
5.	Discuss briefly about sustainable development.	[L2][ <b>10M</b> ]
6.	Discuss the salient features of Water Act.	[L2][ <b>10M</b> ]
7.	Write a note on	
	(a) Kyoto protocol	[L1][ <b>5M]</b>
	(b) Montreal protocol	[L1][ <b>5M]</b>
8.	Explain about Municipal solid waste management.	[L2][ <b>10M</b> ]
9.	How can we create public environmental awareness?	[L2][ <b>10M</b> ]
10.	Describe your recent visit to any industrial site and explain the impact of pollutants emitt	ed on
	Environment and discuss the various measures to control the pollution levels.	[L3][ <b>10M]</b>