

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

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Subject with Code : Environmental Studies (16HS605) Course & Branch : B.Tech – CE Year &Sem : II-B.Tech & II-Sem Regulation : R16 QUESTION BANK (DESCRIPTIVE)

#### <u>UNIT-I</u>

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

1. Discuss Multidisciplinary Nature of Environmental studies.	12M
2. Differentiate Renewable and Nonrenewable resources with examples	12M
3. (a) Discuss the major environmental impacts of mineral extraction .	<b>6</b> M
(b) Classification of minerals with examples.	<b>6</b> M
4. Explain the need of public awareness towards environment	12M
5. What are major causes for conflicts over water? Discuss one international and	
one inter - state water conflict.	12M
6. Discuss the use and over exploitation of water resources and explain hydrological c	cycle. 12M
7. Write a note on effect of mining on forest and tribal people.	12M
8. (a) Discuss briefly droughts and floods	<b>6</b> M
(b) Discuss the ecological uses of forests.	<b>6</b> M
9. (a) Brief note on Nuclear Energy	<b>6</b> M
(b What are the effects of deforestation on Environment?	<b>6</b> M
10. Give detail account on Solar energy, wind energy and Hydropower Energy resource	ces. 12M

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

## **ECOSYSTEM**

1.	b) Define ecosystem and explain in detail about ecological pyramids.	6M
	b) Explain the energy flow in an ecosystem.	6M
2.	Describe the structure and functions of an Ecosystem.	12M
3.	What are Ecological pyramids? Explain different types of ecological pyramids with neat sketc	h. <b>12M</b>
4.	What is the nature of grassland ecosystem? Explain its structure and function.	12M
5.	a) Discuss the models of Energy flow in an Ecosystem.	6M
	b) What are biogeochemical cycles? Explain with the help of a diagram the nitrogen cycle.	6M
6.	Explain	
	a) Food chains	<b>3M</b>
	b) Food web	<b>3M</b>
	c) Ecological pyramids	<b>6M</b>
7.	Explain various processes involved in Ecological succession.	12M
8.	Explain the structural components of desert and lake ecosystem.	12M
9.	a) Define food chain. Write it's types.	<b>6M</b>
	b)Explain the structure and functional components of forest ecosystem.	<b>6M</b>
10	• Explain the different aquatic ecosystems	12M

#### UNIT-III

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

1.	Discuss the values of bio diversity.	12M
2.	Explain	
	a)Genetic diversity	6M
	b) Species diversity	<b>3</b> M
	c) Ecosystem diversity	<b>3</b> M
3.	Give an account on Indian diversity with special reference as a mega diversity nation.	12M
4.	Explain the bio-geographical classification of India.	12M
5.	Give a brief account on	
	a) Social value	<b>2</b> M
	b) Ethical value	<b>2M</b>
	c) Aesthetic value	<b>2M</b>
	d) Optional value	<b>2M</b>
	e) Social values	<b>2M</b>
6.	a)Define hotspot of bio diversity?	6M
	b) Which are the hotspots found in India? Discuss their salient Features.	6M
7.	What are the major threats to bio diversity?	12M
8.	Give a brief account on	
	a) Endangered species	6M
	b) Endemic species	6M
9.	Explain	
	a)In-situ Conservation	6M
	b)Ex-situ Conservation	6M
10	. Explain	
	a) Red data book	<b>3</b> M
	b) Loss of Habitat	<b>3</b> M
	c) Poaching.	6M

#### UNIT-IV

#### ENVIRONMENTAL POLLUTION AND GLOBAL ENVIRONMENTAL ISSUES

1Define Air pollution. Explain its causes, effects and control measures of Air pollution	<b>12M</b>	
2. Write a note on		
(a) Water Pollution	<b>6M</b>	
(b) Land pollution	<b>6M</b>	
3. (a) What is an earth quake? Write it's effects.	<b>6M</b>	
(b) Land slides	<b>6M</b>	
4. (a) Discuss the sources , effects and control of ozone layer depletion	<b>6M</b>	
(b) Nuclear Pollution	6M	
5. Write a note on		
(a) Acid rains	<b>6M</b>	
(b) Global Warming	<b>6M</b>	
6. Define noise pollution. Explain it's causes, effects and control measures of noise pollution	12M	
7. (a) Explain Droughts and floods and		6N
(b) Cyclone	<b>6M</b>	
8.(a) What is watershed management? Discuss Practices of watershed management.	<b>6M</b>	
(b)Write a short note on Role of individual in prevention of pollution.	6M	
9. (a) What is solid waste management ?Explain its causes and effects.	6M	
(b)Write a short note on control measures of solid waste management.	<b>6M</b>	
10. Write a note on Population growth ? What are the factors influencing population size?	12M	

#### UNIT-V

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

1 .Discuss the salient features of forest conservation Act and Wild life (protection) Act	<b>12M</b>
2. Describe Air (Prevention and control of pollution) Act and Environment(Protection) Act	<b>12M</b>
3 .What is the role of Information technology in Environment and human health.	12M
4. (a)What are the strategies taken for the development of child in healthy environment.	<b>6M</b>
(b)Discuss the impact of increase of pollution on environment	<b>6M</b>
5. Discuss briefly about sustainable development	<b>12M</b>
6. Discuss the salient features of Water Act	<b>12M</b>
7. Write a note on	
a) Kyoto protocol	<b>6M</b>
b)Montreal protocol	<b>6M</b>
8. Explain about Municipal solid waste management	<b>12M</b>
9. How can we create public environmental awareness.	12M

10. Describe your recent visit to any industrial site and explain the impact of pollutants emitted on<br/>environment and discuss the various measures to control the pollution levels.12M