MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India) UG Model question paper Environmental Studies

Time: 3 hours Max Marks: 70

Note: This question paper contains of 5 sections. Answer five questions, choosing one question from each section and each question carries 14 marks.

SECTION-I	
1 a) Define Ecosystem? Explain Food-Chain, Food-Web with examples and their significance? [9M]	
b) Write notes on Ecological pyramids?	[5M]
OR	
2 a) what are biogeochemical cycle? Explain Nitrogen cycle, Carbon cycle with help of diagram?	[9M]
 b) Explain the role of producers, consumers, and decomposers in an ecosystem? SECTION-II 	[5M]
3 a)Define deforestation? Explain the causes and effects of deforestation?	[7M]
b) What are environmental impacts of DAM construction?	[7M]
OR	
4 a) What are photovoltaic cell/ solar cell? Draw a diagram and enumerate its applications?	
	[7M]
b) Write a notes on non-renewable resources?	[7M]
SECTION-III	
5 a) Define Biodiversity? Explain Value of Biodiversity?	[9M]
b)What are major threats to Biodiversity?	[5M]
OR	
6 a) What are hotspots of biodiversity? Which are the hotspots found in India?	[7M]
b). Explain Conservation of biodiversity?	[7M]
SECTION-IV	
7 a) Define Environmental pollution? Briefly describes the sources, effects and control pollution?	of Air [14M]
OR	[]
8 a) Briefly describes the sources, effects and control of Water pollution?	[9M]
b)Explain climate change,a. Global warming/Green House effect, b. Ozone depletion SECTION-V	[5M]
9 Write notes on:	
a) Environmental Impact Assessment	
b) Environmental management plan	[14M]
OR	
10 Write salient features of	
a) Air Act-1981	[1 A N #]
b) Water Act -1974	[14M]

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SECTION-I

- 1. a) Explain structure and function of ecosystem in detail?
 - b) Explain the different types of ecological pyramids, food chain and food web. [7+7M]

OR

- 2 a) Explain Biogeochemical Nitrogen cycle and Water cycle in detail.
 - b) Explain biomagnifications and bioaccumulation concept with examples.
 - c) Explain energy flow in an ecosystem.

[7 + 3 + 4M]

- SECTION-II
- 3 a) Discuss the benefits and impacts of big dams.
 - b) Define deforestation, Explain the various causes and effects of deforestation? [7+7M]

OR

- 4 a) Explain renewable and non-renewable resources in detail? Give examples.
 - b) Define surface and ground water? What are the effects of over utilization of groundwater?

[7+7M]

SECTION-III

- 5 a) Define biodiversity. What are the HOTSPOT of biodiversity?
 - b) Explain the values and threats of biodiversity

[4+10M]

OR

6 a) Explain the conservation methods to protect biodiversity

[14M]

SECTION-IV

- 7 a) Define air pollution? Discuss its major sources, causes, effects and control measures of air pollution.
 - b) Explain solid waste management, its types and e -waste management.
 - c) Explain impacts of modern agriculture on soil pollution.

[7+4+3M]

OR

- 8 a) Define water pollution? Discuss causes and effects and control measures of water pollution.
- b) Explain green house effect and ozone depletion in detail.

[7 + 7M]

SECTION-V

- 9 a) Explain environment protection act and forest conservation act
 - b) Explain international conventions
 - 1)Earth summit
 - 2) Kyoto protocol
 - 3)Montreal protocol

[7+3+2+2M]

OR

- 10 a) Explain biomedical management and handling rules.
 - b) Explain the methodology for carrying out EIA with the help of a flow chart.
 - c) Explain air act 1986 and sustainable development.

[5 + 5 + 4M]