

Code No: A10012

# MLR INSTITUTE OF TECHNOLOGY

(Autonomous Institute)

II B. Tech I Sem Supplementary Examinations, January-2017

## ENVIRONMENTAL STUDIES

(MECH)

- Note: 1. This question paper contains two parts A and B.  
 2. Part A is compulsory which carries 25 marks. Answer all Questions in part A.  
 3. Part B consists of 5 units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c, as sub questions

### PART-A

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|----|--|----|
| 1. | a) What is an eco-system explain   | 2M |
|    | b) Define Biodiveristy. Explain genetic diversity                                  | 2M |
|    | c) What is Environmental Management Plan?  | 2M |
|    | d) Explain about solar harvesting devices  | 2M |
|    | e) Distinguish the term Food chain and Food web                                    | 2M |
| 2. | a) Explain the sources of land pollution.  | 3M |
|    | b) Discuss the basic characteristics of green Building                             | 3M |
|    | c) What is ozone layers depletion? And explain the causes of ozone layer depletion | 3M |
|    | d) What do you mean by Deforestation? Discuss its causes.                          | 3M |
|    | e) Enumerate the various causes and effects of floods                              | 3M |

### PART-B

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|----|---|----|
| 3. | a) Explain the acid rain and its impacts.                               | 5M |
|    | b) Explain with the neat diagram "Nitrogen cycle that occurs in nature" | 5M |

### OR

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|----|--|----|
| 4. | a) Describe the carbon, phosphorous and nitrogen cycle with neat diagram | 6M |
|    | b) List the renewable and non-renewable sources of energy                | 4M |
| 5. | a) What is mineral and explain the impact of mining on forest eco-system | 6M |
|    | b) what is soil erosion? What are the various causes of soil erosion?    | 4M |

### OR

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|----|--|----|
| 6. | a) What do you mean by "Natural Resources" state its kinds and explain major reasons of the resource depletion | 6M |
|    | b) Write in detail about solar Energy  | 4M |

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|----|---|----|
| 7. | a) What is conservation? Explain about Ex-situ and In-situ conservation | 5M |
|    | b) Briefly explain the various steps in EIA                             | 5M |

### OR

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|----|---|----|
| 8. | a) Define Hotspots. What are the Hotspots found in India? Discuss their salient features. | 5M |
|    | b) What are the Major threat to biodiversity  | 5M |

9. a) Differentiate between. 6M  
    i) Herbivores and Carnivores  
    ii) ETP and CETP  
b) Enumerate causes and effects of land pollution 4M

**OR**

10. a) Write short note on  
    i) Global Warming 6M  
    ii) Vienna Protocol 4M  
b) Describe the various method for control water pollution 4M

11. a) Discuss the salient features of Air (prevention and control of pollution) Act 1981 5M  
b) What are the Major Provisions in forest conservation Act 1980 5M

**OR**

12. a) Define sustainable development. Why is it necessary? 5M  
b) Describe the impact of housing activities on environment. 5M