

M. Tech-Energy Management Systems (Old / CBCS Pattern) Sem II
MT-1014.2 - Elective-II : Environmental Science and Engineering

P. Pages : 1

GUG/S/18/3958

Time : Three Hours



Max. Marks : 70

- Notes :
1. All questions carry marks as indicated.
 2. Answer **any five** questions.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Diagrams should be given wherever necessary.
 5. Illustrate your answers wherever necessary with the help of neat sketches.

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| 1. | a) | Discuss about fly ash utilization. | 6 |
| | b) | Explain the process of ozone layer depletion and the problems associated with it? | 8 |
| 2. | a) | Explain the method of air pollution control in nuclear power plant. | 7 |
| | b) | What do you mean by Environmental impact assessment? How it will be carried out for thermal power plants? | 7 |
| 3. | a) | Explain Green Biogas Energy. | 5 |
| | b) | What are the on site and off site land impacts of Generating Electricity? What are the environmental issues with regard to land use? | 9 |
| 4. | a) | Discuss pre-combustion and post-combustion technology employed for reducing pollution in thermal power plants. | 8 |
| | b) | Explain prototype carbon fund? What are its uses. | 6 |
| 5. | a) | Define environmental degradation. Discuss challenges and recommend the methods to reduce this degradation. | 8 |
| | b) | Explain the objectives of CDM? What are the initiatives taken by India on CDM? | 6 |
| 6. | a) | Explain the effects of coal fired power plant on agriculture land with respect to on site & off site impacts. | 8 |
| | b) | Describe the importance of Industrial waste treatment system. | 6 |
| 7. | | How does coal fired plants contribute to acid rain? | 7 |
| | | Discuss the various causes and effects of acid rain on the biological damage. | 7 |
| 8. | a) | What do you understand by term "greenhouse gases"? Explain its effects on environmental changes. | 9 |
| | b) | How does electric power production affect the global climate? | 5 |
