# CERTIFICATE PROGRAM EXAMINATION JUNE 2019.

#### ENERGY AND ENVIRONMENT

Time: 3 hours Maximum marks: 75

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

Answer any FIVE out of EIGHT.

- 1. Write briefly about per capita energy consumption.
- 2. Give a note on solar and wind: power generation.
- 3. Compare energy ladder with energy supply.
- 4. Discuss the environmental impacts of energy systems.
- 5. Write a short note on Greenhouse Gas emission.
- 6. Write shortly about energy units and scales.
- 7. Describe shortly the energy conservation in transport.
- 8. Give in detail about conventional and renewable energy sources.

### PART B — $(5 \times 10 = 50 \text{ marks})$

### Answer any FIVE of out EIGHT.

- 9. Explain in detail about energy linkage with livelihood and development process.
- 10. Describe about the various types of biomass stoves.
- 11. Discuss the conflicts between fuel and food energy.
- 12. Explain the causes of Global, Regional and local climate change.
- 13. Describe about the clean development mechanism.
- 14. Explain the interaction of energy technologies with the environment.
- 15. Discuss the power generation from different energy sources.
- 16. Describe in detail about energy and economy.

## CERTIFICATE PROGRAM EXAMINATION JUNE 2019.

### ENERGY AND CLIMATE CHANGE

Time: 3 hours Maximum marks: 75

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

Answer any FIVE out of EIGHT.

- 1. Write briefly about equity and disparity.
- 2. Write a note on Greenhouse gases emission.
- 3. Mention about the role of technology upgradation on reduction on CO<sub>2</sub> emission.
- 4. Give the case example of CO<sub>2</sub> emission in agricultural sector.
- 5. What is meant by Carbon credit? and Give some examples for it.
- 6. Give a note on energy consumption pattern.
- 7. Explain the fundamental concept on combustion.
- 8. Write briefly about Carbon Credit national policies.

### PART B — $(5 \times 10 = 50 \text{ marks})$

### Answer any FIVE out of EIGHT.

- 9. Explain in detail about an overview of energy sources and technologies.
- 10. Discuss about International concern on climate change and mitigation efforts.
- 11. Describe comparison of different technologies and different resources used for energy conversion in relation to CO2 emission.
- 12. Write short note on
  - (a) Fuel to energy conversion
  - (b) Carbon foot print
- 13. Describe the current efforts and future prospect of Carbon trading mechanism.
- 14. Explain the theory of global climate change.
- 15. Describe some case examples for industrial and transport sector.
- 16. Discuss about social and economic implications of energy uses.

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