CERT-C-2100 **CPCC–01**

CERTIFICATE EXAMINATION – FEBRUARY 2025.

Climate Change

ENERGY AND ENVIRONMENT

Time : 3 hours Maximum marks : 75

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

All questions carry equal marks.

1. How does energy consumption impact on economic growth?

2. Compare renewable and non-renewable energy sources.

3. Discuss the energy conservation way in household.

4. Write a note on environmental impacts of energy systems.

5. Explain the term global warming with a suitable example.

6. Compare conventional and non-conventional energy sources.

7. Discuss hydro power generation facilities available in India.

8. Write a note on health issues related to biomass-based cooking devices.

SECTION B — ($5 \times 10 = 50$ marks)

Answer any FIVE questions.

All questions carry equal marks.

9. Explain development process of energy technologies in India.

10. Explain coal, oil and natural gas and its applications.

11. Describe the uncertainties and social cost-benefit analysis of renewable energy systems.

12. Illustrate technical options for transforming energy systems to reduce environmental impacts.

13. Write a note on :

    (a) United Nations Framework Convention on Climate Change (UNFCC) and

    (b) Prototype Carbon Fund (PCF).

14. Describe the uncertainties and social cost-benefit analysis of renewable energy systems.

15. Discuss biomass resources and its uses and explain its advantages and disadvantages.

16. Write a note on :

    (a) Conference of Parties (COP) and

    (b) Clean Development Mechanism (CDM).

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CERT-C-2101 **CPCC-02**

CERTIFICATE COURSE EXAMINATION — FEBRUARY 2025.

Climate Change

ENERGY AND CLIMATE CHANGE

Time : 3 hours Maximum marks : 75

SECTION A — ($5 \times 5 = 25$ marks)

Answer any FIVE questions.

All questions carry equal marks.

1. Write a note on equity and disparity.

2. What are the primary green house gases emitted by human activities?

3. Explain the different technologies used for energy conversion in relation to CO_2 emission.

4. Write the methodology of carbon footprint measurement.

5. Write a note on carbon credit with a suitable example.

6. Discuss the ideas how to reduce carbon emissions.

7. Write a note on energy consumption pattern.

8. Explain the term international concern on climate change.

SECTION B — ($5 \times 10 = 50$ marks)

Answer any FIVE questions.

All questions carry equal marks.

9. Briefly explain the overview of energy sources and technologies in the world.

10. Explain the basic concepts of global climate change and its impacts.

11. Describe the role of technology up-gradation and alternative resources on reduction of CO_2 emission.

12. Discuss briefly the emission of carbon from major sectors with an example.

13. Explain the current efforts and future prospect of carbon trading mechanism and write the merits and demerits.

14. Write a note on estimation of emission from fossil fuel combustion.

15. Describe the social and economic implications of energy uses.

16. Explain the various fundamental concepts of combustion and write down its applications.

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