

TERM END EXAMINATION- JUNE 2019
Certificate in Climate Change and Sustainable Development (CCSD)
Introduction to Climate Change and Sustainable Development: Principles
and Approaches.

Time: 3 Hours

Full Marks-100

Answer all questions from Group- 'A', any four questions from Group- 'B', any four questions from Group- 'C' and any two question from Group- 'D'

Group – 'A'

Q.1. Answer all the questions, each within one or two sentences (1x10=10 Marks)

- a) What is rotation of the earth?
- b) _____ is one of the ways that energy is transferred from the earth's atmosphere to the air and the process by which heat energy is transmitted through collisions between neighbouring molecules.
- c) This energy which is radiated in all directions into space through short waves is known as _____.
- d) The winter solstice begins from _____ onward the length of day increases in the northern hemisphere till the summer solstice.
- e) Which are the forms of Precipitation?
- f) Mention at least one characteristic of electromagnetic radiation?
- g) _____ is the process that accounts for about 19% of insolation. Gases, clouds, dust and haze all absorb certain wavelengths of insolation, which is transformed into molecular motion resulting in a rise in temperature.
- h) Horizontal distribution of pressure is shown by _____.
- i) Give one example of a type of Scattering.
- j) What is the wave length of visible spectrum?

Group – 'B'

Q.2. (Answer any four questions each within 100 words) (5x4=20 Marks)

Write short notes on

- a) Natural causes of climate change
- b) Tropical cyclone
- c) Stratosphere
- d) Green energy
- e) Sea level rise
- f) Sustainable growth within planetary boundaries.

Group – 'C'

Q.3 (Answer any four questions each within 200 words) (10x4=40 Marks)

- a) Discuss elements of weather and climate.
- b) Discuss the global heat budget.
- c) Discuss the causes and consequences of global warming.
- d) Discuss the impact of climate change on food security and human health.
- e) Write an account on the international and national debates on climate change.
- f) Discuss the role of green energy in sustainable development.

Group – 'D'

Q.4. (Answer any two questions each within 300 words) (15x2=30 Marks)

- a) What is climate Change? Discuss its impact on both natural and man Made environment.
- b) Discuss the structure and composition of the atmosphere.
- c) What is sustainable growth? Discuss emerging trends in sustainable development strategies.