

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023  
(Third Semester)

Branch – ENVIRONMENTAL SCIENCE

CLIMATE CHANGES AND MANAGEMENT

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

1. The major objective of Kyoto protocol was to
  - (i) Protect ozone layer
  - (ii) Reduce Carbon dioxide emission
  - (iii) Reduce greenhouse gases emission
  - (iv) All of these
2. 'London smog' is formed as a result of
  - (i) Burning nitrogenous matter
  - (ii) Burning sulphur components
  - (iii) Burning carbon
  - (iv) Burning wood
3. Country to implement carbon tax for the first time.
  - (i) New Zealand
  - (ii) China
  - (iii) Australia
  - (iv) India
4. Mount Kilimanjaro is \_\_\_ volcano.
  - (i) Active
  - (ii) Extinct
  - (iii) Passive
  - (iv) Dormant
5. In which year CRZ was issued in India?
  - (i) 1998
  - (ii) 1991
  - (iii) 2000
  - (iv) 2001

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

6. a Differentiate between climate and weather.  
OR  
b Classify the Indian monsoon seasons.
7. a State the greenhouse gas emission on aviation sector.  
OR  
b Elaborate on particulate matters and associated health issues.
8. a Discuss the various carbon sink and sources to combat climate change.  
OR  
b Explain the significance of carbon stock assessment.

Cont...

9. a What are volcanic eruptions? Categorize the types of volcanoes with suitable examples.  
OR  
b What are natural disasters? Analyze the risk factors of forest fires.
10. a Classify the various zones according to CRZ notifications.  
OR  
b Analyse the significance of various disaster warning systems.

**SECTION -C (30 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** Marks (5 x 6 = 30)

11. a Differentiate El Niño and La Niña. Critically analyze the role of humans induced climate variability.  
OR  
b Elucidate the land use patterns influence on global warming.
12. a Evaluate the various sources of greenhouse gas emissions from agricultural sector.  
OR  
b How do polar ice melting affect biodiversity resources?
13. a Assess the various initiatives by Government of Tamil Nadu pertaining to net zero commitments.  
OR  
b Critically analyze the India's INDC Commitments to combat climate change.
14. a Interpret the different factors affecting the severity of seismic forces.  
OR  
b Categorize the different types of droughts with examples.
15. a Explain the steps involved in Disaster Management Cycle.  
OR  
b Design disaster management and prevention plan associated with floods.

Z-Z-Z

END