

Name :

Reg. No:.....

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**THIRD SEMESTER M.Sc DEGREE EXAMINATION DECEMBER 2015
(CUCSS)
Environmental Science
ES 3C 16 ECOSYSTEMS AND GLOBAL CLIMATE CHANGE
(2014 Admission)**

Time : Three Hours

Maximum : 36 Weightage

Part I**Short Answers (Answer all 14 questions)**

14X1 = 14 weightage

1. What are transboundary pollutants?
2. Define ecosphere.
3. Define Gaia hypothesis.
4. What are Hadley cells?
5. Define anticyclone.
6. What is albedo?
7. Define global warming potential.
8. What is coral bleaching?
9. What is adiabatic lapse rate?
10. What is tropopause?
11. Define temperature inversion.
12. What are sea sprays?
13. What is plume?
14. How will you measure atmospheric humidity?

Part II**Short essays (Answer any seven of the following)**

7X2 = 14 weightage

15. Explain the Earth's geological history.
16. Describe the vertical stratification of atmosphere.
17. Explain the factors that affect climate.
18. Explain the circulation pattern of winds in the atmosphere.
19. Describe the energy balance of atmosphere.
20. What are the causes and effects of monsoon in India?
21. Write a note on ozone depleting substances.
22. Write a note on enhanced green house effect.
23. Explain the effect of climate change on biodiversity.
24. Describe the flexibility mechanisms of Kyoto protocol.

Part III**Essay type (Answer any two questions)**

2X4 = 8 weightage

25. Write an essay on ENSO and their consequences on the globe.
26. What is carbon sequestration? Describe the role of oceans and forests as carbon sinks.
27. What is climate change? What are the factors and mitigatory effects of climate change?
28. What are the factors contributing to ozone depletion. Describe the salient features of Montreal protocol.