

## Environmental Science

Time: 90minutes

Total Marks: 45

Note: No clarifications will be given during the exam

If need, make Suitable assumptions and state it clearly when answering

## 1. Fill in the blanks

10x0.5=5

- ✓ a. -----projects are not eligible under CDM *nuclear*
- b. In mature forests all of the gross primary productivity is either used up in ----- or returned to soil as ----- with no net addition to the standing biomass.
- ✓ c. ----- is the major source of methane emissions
- ✓ d. -----stores carbon while protecting water quality *Riparian forest buffer*
- ✓ e. A forest that is growing can remove -----CO<sub>2</sub> per hectare per year,
- ✓ f. The air we breathe in major cities like Beijing or Delhi or London is equal to having ----- cigarettes per day.
- ✓ g. The study of physiology of earth is called----- *Earth System Science*
- ✓ h. Soils store about -----times as much carbon as does terrestrial vegetation *3x*
- ✓ i. One kilogram of dry wood contains ----- kg of carbon *0.5*

## 2. Expand

5x1=5

- a. IPCC b. UNFCCC c. CER d. CCE e. GWP

*Intergovernmental Panel on Climate Change*

*United Nations Framework Convention on Climate Change*  
Carbon Emission Reduction

## 3. Define

5x1=5

- ✓ a. Ecology b. Remote sensing c. Oligotrophic lake *No animals* d. Agroforestry e. CDM *Clean Development mechanism*

## 4. Answer in one or two sentences – What is

3x1=3

- ✓ a. GAIA b. Conservation tillage c. Geological sequestration *and*

## 5. Answer in two or three sentences – Differentiate between

3x1=3

- ✓ a. El Niño and La Niña b. Annex-1 and Annex-2 countries
- c. Joint implementation and CDM (under Kyoto protocol)

## 6. Answer in two or three sentences - with respect to climate change, why

2x1=2

- ✓ a. there will be more frequent volcanic eruptions
- ✓ b. Oceans become dark

7. *Answer in three sentences- what are the ecological impacts of*

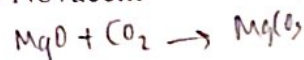
2x1.5=3

- ✓ a. Sand mining ✓ b. Urea fertilization

8. *Answer in three sentences- brief account on*

2x1.5=3

- ✓ a. Kyoto protocol ✓ b. Novacem



9. *Answer in three or four sentences-Explain following hypothesis*

2x2=4

- ✓ a. GAIA ✓ b. Iron

10. *Answer in three or four sentences - explain*

3x3=9

- ✓ a. Climate change effect on plant diversity  
✓ b. Impact of sea level rise on Sunderban forest  
c. In what way remote sensing technology is useful in understanding environmental problems

11. Draw a cartoon / portrait depicting any one environmental problem

1x2=2

12. Write a slogan related to environmental problem / solution  
(Expect unique and self designed)

1x1=1