

Environmental Science

Time: 90 minutes

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 -----CO₂ 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 *oiled*

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*

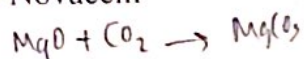
2x1.5=3

- ✓ 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