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KERALA AGRICULTURAL UNIVERSITY B.Sc. (Ag) 2006 Admission VI Semester Final Examination July / August 2009

Chem 3205

Agro ecology and environmental pollution (2+1)

Max. Marks: 60 Time: 2½ hours

I. Objective type questions

Fill up the blanks

20X0.5 = 10

A1. Group of inbreeding individuals are known as
A2is an example for in situ conservation of biodiversity.
A3. Wind energy is a type of energy.
A4 is an example for aquatic top carnivore.
A5is a gaseous pollutant released from paddy fields.

Give the name of

- A6. Any one Nitrification organism.
- A7. Phosphorus mobilizing bacteria
- A8. Any one green house gas
- A9. Household hazardous waste
- A10. Detritivores.

State whether true or false

- A11. Blue baby syndrome is caused due to nitrate pollution
- A12. Global warming also leads to loss of biodiversity.
- A13. Mercaptan is a reduced form of sulphur.
- A14. Green plants are also known as converters.
- A15. Eicchornia is a herbivore in aquatic ecosystem.

Choose the best answer.

- A16. The functional role of an organism in an ecosystem.
 - a. Climax. b. Niche c. Succession d. Ecad
- A17. The following are predators except
 - a. Drosera. b. Orabanche c. Preying mantis d. Nepenthes
- A18. The following gas plays an important role in global warming
 - a. Carbondioxide. b. Oxygen c. Helium. d. Ozone.
- A19. Top carnivore in terrestrial ecosystem is
 - a. Deer. b. Snake c. Lady bird beetle d. Lion
- A20. The following are phytoplanktons except
 - a. Spirulina. b. Oscillatoria c.Rotifers d. Spirogyra.

II Give short answers for the following:

14X1 =14

- B1. Define Ecosystem
- B2. Define Biomes
- B3. Define Food chain
- B4. Define Vermicomposting
- B5. Define Niche
- B6. Name any one phosphorus mobilizing fungi
- B7. Name any one partial parasite
- B8. Name any one top carnivore in terrestrial ecosystem.
- B9. Name any one zooplankton in aquatic ecosystem.
- B10. Name any one secondary air pollutant.
- B11. Distinguish between symbiosis and proto-cooperation.
- B12. Distinguish between nitrification and denitrification.
- B13. Name any one radioactive pollutant.
- B14. What do you mean by Immobilization.

III. Write short notes on the following. Answer any eight questions only

8X2 = 16

- C1. Biomagnification
- C2. Amensalism
- C3. Climax community
- C4. Abiotic factors of an ecosystem
- C5. In-situ conservation of biodiversity
- C6. Major sources for air pollution
- C7. Soil erosion
- C8. Point source water pollutants
- C9. Predation
- C10. Energy flow in an ecosystem

IV. Write short essays on any five of the following.

5X4 = 20

- D1. Write in detail about the various sources for water pollution.
- D2. Write in detail about the phosphorus cycle.
- D3. Write in detail about the biotic and abiotic components of agro-ecosystem
- D4. Explain in detail about the green house gases and their sources.
- D5. What are all the different interactions between organisms. Give examples.
- D6. Explain in detail about the forest resources.