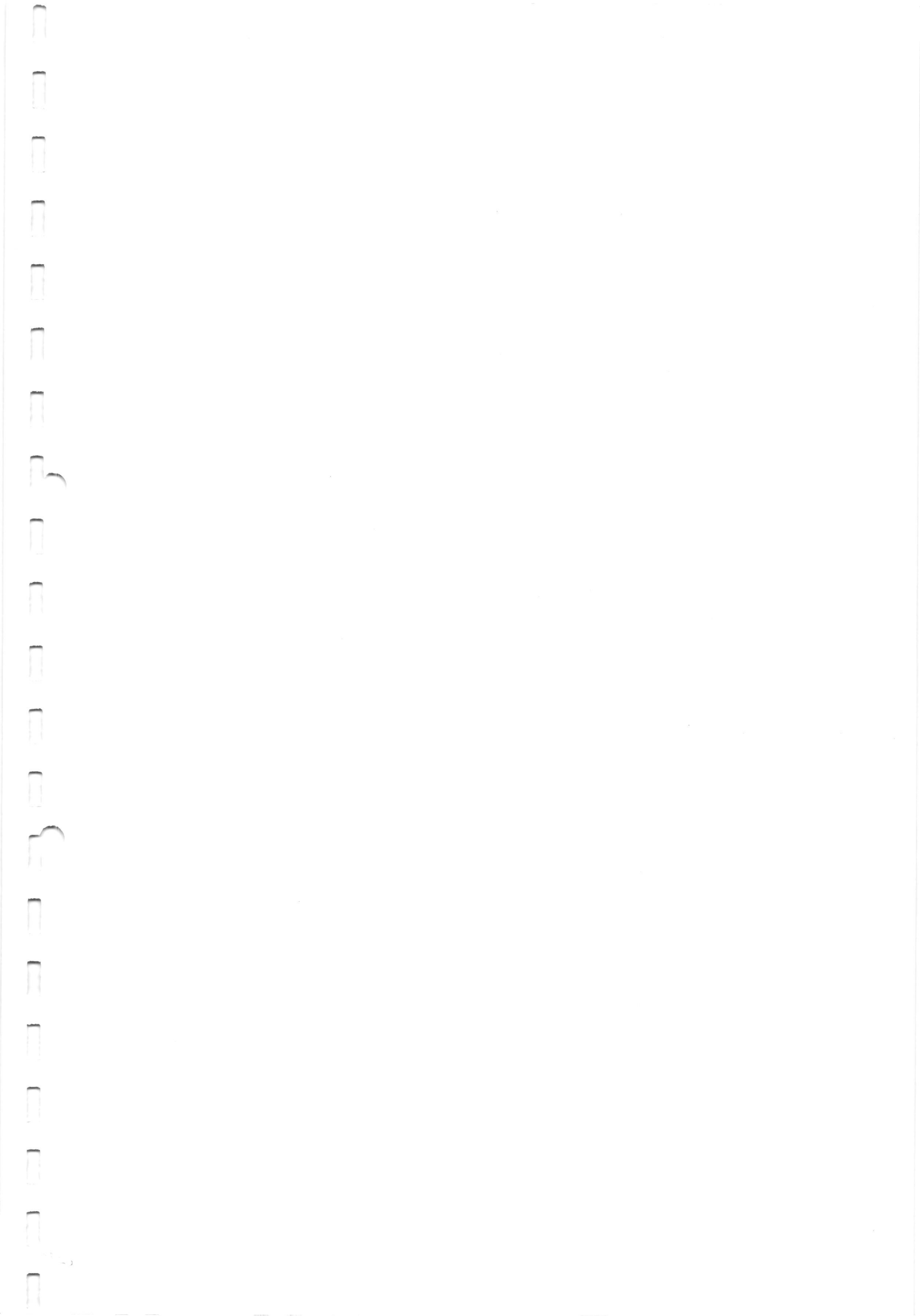


SECTION "C"
[10 marks]

Fill in the blanks:

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1. Treatise on Limnology was written by _____.
2. _____ are the most dominant producers of the seas and the oceans.
3. Waters of the rock dominated end of the spectrum in Gibbs's diagram are rich in _____ and _____.
4. The Marianna Trench in the Pacific represents the _____ zone.
5. Inorganic substrates larger than 40 cm are called _____.
6. Different sources of water in wetlands are _____, _____ and _____.
7. Organisms adapted to a narrow range in temperature changes are called _____.
8. _____ is a macroinvertebrate Family most dominant in very cold waters.
9. The longest distance an air mass can travel along the lake to physically move and mix water is called a _____.
10. Insect Orders end with suffix _____.
11. Xylophagous taxa feed on _____.
12. Plants take up Nitrogen in the form of _____.
13. Graphical representation of the relationship of the surface area of a lake to its depth is shown by _____.
14. The amount of dissolved oxygen required by the microbes to degrade the organic load in a water body is called _____.
15. Redfield ratio describes the concentrations of _____, _____ and _____.



KATHMANDU UNIVERSITY
End Semester Examination
February/March, 2018

MAR 18 2018
MAR 18 2018

Level : B.Sc.
Year : IV
Time : 2 hrs. 30 mins.

Course : ENVS 415
Semester: I
F.M. : 55

SECTION "D"

[3 Q. × 7 = 21 marks]

Answer Any *THREE* of the following:

1. Explain the River Continuum concept with particular reference to fish assemblages.
2. Give an account of the different major ions and their importance in freshwater ecosystems with appropriate examples.
3. Give an account of the characteristic features of the deep sea environment. Add a note on the adaptation shown by deep sea organisms.
4. Define wetlands. Describe the significance of the different types of wetlands citing appropriate examples.

SECTION "E"

5. Write short notes on (any *FOUR*) [4Q.×2=8]
 - a) Lake types based on mixing
 - b) Significance of estuaries
 - c) Fish ecosystem services
 - d) Paradox of planktons
 - e) Langmuir vortices
6. Differentiate between (any *FOUR*) [4Q.×2=8]
 - a. Polysaprobic taxa and Oligosaprobic taxa
 - b. Thermocline and chemocline
 - c. Nitrification and denitrification
 - d. Positive and negative heterograde depth profiles
 - e. Marshes and swamps
7. Give an account of (any *THREE*) [3Q.×4=12]
 - a. Diatoms as bioindicators
 - b. Significance of riparian zones
 - c. Silica lake depth profile
 - d. Significance of upwelling
8. Give reasons for the following statements: [4Q.1.5=6]
 - a. CPOM are abundant in headwaters.
 - b. Tectonic lakes are very deep.
 - c. Coral reefs are found in tropical waters.
 - d. Hydrothermal vents are characterized by high temperatures

