

Total No. of Questions : 5]

SEAT No. :

[Total No. of Pages : 2

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**[5115]-28**

**F.Y. B.Sc.**

**ENVIRONMENTAL SCIENCE**

**ENV - 101 : Fundamentals of Environmental Chemistry &  
Environmental Biology  
(New Course) (2013 Pattern) (Paper - I)**

*Time : 3 Hours]*

*[Max. Marks : 80*

*Instructions to the candidates:*

- 1) All questions are compulsory.*
- 2) Neat and labeled diagrams must be drawn wherever necessary.*
- 3) Figures to the right indicate full marks.*

**Q1)** Attempt the following in not more than 5 lines:

**[16]**

- a) Define Microbes, Viruses & Fungi with example.
- b) What are the characteristic features of orthopods.
- c) What do you meant by Survival of Fitest.
- d) Explain the concept 'Invasive Spacies'.
- e) Give reactions of Acid rain Formation by sulphure.
- f) Write in short information about Minamata disease.
- g) Give the principle of pH meter.
- h) Explain the term equivalent weight.

**Q2)** Answer any FOUR of the following:

**[16]**

- a) Write a note on adaptation found in Hydrophites.
- b) Give detailed characteristics of reptites & Birds.
- c) Add a note on factors responsible for spaciation.
- d) Give possible remedies of mass extinction.
- e) Explain the process of Hydrogen bonding in water.
- f) What are the interactions of Gases with water.

**P.T.O.**

**Q3)** Write short notes on any FOUR of the following: **[16]**

- a) Distinguish between monocots & dicots plants.
- b) Structure of Bacteria.
- c) Major Forest types of India.
- d) Anionic surfactants.
- e) Hooker system of classification.
- f) Scope of Environmental Chemistry.

**Q4)** Answer any TWO of the following: **[16]**

- a) What are epiphytes & mesophytes give two examples of each.
- b) Define biogeochemical cycle. Explain in detail carbon cycle.
- c) Explain in detail methods used in Environmental Analysis.
- d) Define Biogeography. Explain Biographical profile of India.

**Q5)** Answer any ONE of the following: **[16]**

- a) Define Bioresources. Explain in detail Forest & Agriculture as resource.
- b) Explain in detail food additives. Write a note on effects of additive on humans.

