B.Sc. (Part - I) (With Credits)-Regular-Semester 2012 Sem I

01-P-I-Paper-I : Environmental Science-I Fundamentals of Environmental Science (New & Old Course)

GUG/W/16/3309 P. Pages: 4 Time: Three Hours Max. Marks: 50 **Fundamentals of Environmental Science (New Course)** Notes: 1. All questions are compulsory and carry equal marks. Illustrate the answers with suitable diagrams and examples. 2. How formation of biopolymers and appearance of living cell occurred on earth? What are 1. **10** factors supporting life? OR Describe structure of atmosphere on the basis of temperature and composition. 2. Explain various processes involved and their complex interactions in hydrological cycle. 10 OR What is weathering? Describe its types. **3.** Explain Big Bang theory. $2^{1/2}$ a) What is lapse rate and temperature inversion? b) $2^{1/2}$ Give an account on fresh water resources of India. $2^{1/2}$ c) $2^{1/2}$ d) Describe soil density as a property of soil. OR Give structure of the earth's interior. e) f) What is precipitation? Discuss its any two form. Describe thermal stratification of a lake. g) State importance of minerals. h) Comment on atmosphere and hydrosphere of primitive earth. $2^{1/2}$ 4. a) b) What is weather forecasting? Explain methods for weather forecasting. $2^{1/2}$ Write a note on zonation in marine environment. c) $2^{1/2}$ d) Describe types of rocks.

 $2^{1/2}$

OR

- e) How dinosaurs disappeared from earth?
- f) Explain the method for measurement of atmospheric humidity.
- g) What is lotic environment? Discuss their characteristic features.
- h) State consequences of over exploitation of mineral resources.

5. Answer in 2-3 lines any ten.

10

- a) What is meteorite?
- b) Name any two planets of solar system.
- c) What is approximate age of the earth?
- d) In which unit atmospheric pressure is reported.
- e) What is secondary meteorological parameter?
- f) Name the instrument used for measurement of wind speed.
- g) What are glaciers?
- h) In which unit salinity is reported.
- i) After how many years normally El Nino phenomenon occurs.
- j) What is petrology?
- k) Define pedology.
- 1) Give examples of important minerals in India.

Fundamentals of Environmental Science (Old Course)

Time: Three Hours Max. Marks: 50 Notes: 1. All the questions are compulsory and carry equal marks. 2. Illustrate the answers with suitable diagrams and examples. Describe Big Bang Theory. How atmosphere and life developed on earth? 10 1. OR Define meteorology. What are the meteorological parameters and how their measurements are carried out? What is hydrosphere? Explain hydrological cycle. 2. 10 OR Describe earthquake as a geological process. **3.** What is the scope of environmental science? $2^{1/2}$ a) What are the forms of condensation? b) $2^{1/2}$ Explain the zonation of marine environment. c) $2^{1/2}$ $2^{1/2}$ Describe internal structure of the earth. d) OR Discuss multidisciplinary nature of Environmental Science. e) f) What are the important chemical species present in atmosphere? Explain lentic environment of water. g) How different types of rocks are formed? h) $2^{1/2}$ State goals and objectives of environmental education. 4. a) Discuss the role of satellite in weather forecasting. $2^{1/2}$ b) c) Give fresh water requirement of India. $2^{1/2}$ Explain types of weathering. $2^{1/2}$ d) OR How formal environmental education in India is organized? e) Draw a diagram and explain different regions of atmosphere. f)

- g) What are the freshwater resources of India?
- h) Explain soil density as physical property of soil.

5. Answer in 2-3 lines **any ten.**

10

- a) What is meteorite?
- b) What is fragile environment?
- c) Name the national environmental organizations.
- d) Which are the different types of particulates present in the atmosphere?
- e) What is humidity?
- f) What are the different forms of precipitation?
- g) What is the lotic environment?
- h) What are glaciers?
- i) What is salinity of water?
- j) State the types of geological processes.
- k) What is pedology.
- 1) What is basic soil?
