M. Sc. DEGREE END SEMESTER EXAMINATION - JULY 2021

SEMESTER 2 : ENVIRONMENTAL SCIENCE

COURSE : 16P2EVST06 : EARTH AND ATMOSPHERE

(For Regular - 2020 Admission and Supplementary - 2019/2018/2017/2016 Admissions)

Time : Three Hours

Max. Marks: 75

PART A Answer any 10 (2 marks each)

- 1. Define Environmental Chemistry.
- 2. Explain the concept of life.
- 3. Distinguish between physical and chemical weathering.
- 4. Distinguish between sandy soil and silty soil.
- 5. Explain sea level change.
- 6. What is the relation between colloids and the nutrient binding capacity of the soil?
- 7. Distinguish between climatology and meteorology.
- 8. Define ENSO.
- 9. Explain the montane or alpine climate of India.
- 10. Define ecosphere.
- 11. Define estuary.
- 12. State empty niche hypothesis.

(2 x 10 = 20)

PART B Answer any 5 (5 marks each)

- 13. Describe the components of Environmental Science.
- 14. Describe the structure of Earth.
- 15. Write a short note on Pangaea formation in terms of plate tectonics.
- 16. Explain "the ring of fire".
- 17. Draw a schematic view of the components of the global climate system.
- 18. Explain the global climatic phenomena-El Nino and La Nina.
- 19. Comment on the role of tectonic processes in shaping the landscape.
- 20. Explain the term fitness to the new environment with suitable example.

(5 x 5 = 25)

PART C

Answer any 2 (15 marks each)

- 21. With the help of a diagram explain the processes in the hydrologic cycle.
- 22. Explain causes and factors of climate change. Discuss the effect of climate change on ecosystems and human welfare.
- 23. Describe the concept of ecological land degradation and its major types.
- 24. Discuss different methods used for the control of invasive species.

(15 x 2 = 30)