Reg. No.: 24MEI10126

Name : Sayon Biswas



## MID TERM EXAMINATIONS - November 2024

| Programme | : B.Tech.                      | Semester    | : | Interim Semester 2024-25 |
|-----------|--------------------------------|-------------|---|--------------------------|
|           | : Environmental Sustainability | Course Code | : | CHY1006                  |
|           | : 14 Nov 2024/Session II       | Slot        | : | B14                      |
| 7911      | : 1 ½ hours                    | Max. Marks  | : | 50                       |

## **Answer all the Questions**

| Q.No. | Sub.<br>Sec. | Question Description  | Marks |
|-------|--------------|---|-------|
| 1     | (a)          | How has the burning of fossil fuels, overpopulation, deforestation, and waste disposal affected our environment?  | 10    |
| 2     |              | Humans depend on the environment for their basic needs and they are constantly affecting the environment in various ways. Discuss the impacts of various interactions between society and the environment. Further, discuss the sustainable strategies for the environment too. | 10    |
| 3     |              | Explain Lindeman's 10% energy flow rule in ecosystems and its significance in understanding trophic dynamics and energy transfer.   | 10    |
| 4     |              | The biogeochemical cycles are the cycling of chemical elements through the earth's atmosphere, oceans, and sediments as it is affected by geological and biological cycles. In light of this statement discuss the Nitrogen cycle with the help of a neat diagram.              | 10    |
| 5     |              | Write a short note on the; (1) Virtual Water  |       |
|       |              | <ul><li>(2) Biological oxygen demand (BOD)</li><li>(3) Point &amp; Non-point sources of pollution</li><li>(4) Pathogens.</li></ul>  | 10    |
|       |              | $\Leftrightarrow \Leftrightarrow \Leftrightarrow$   |       |