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**School of Biological and Life sciences**

Bachelor of Science Honours in Biomedical Science

Mid Term Examination - May 2024

Duration : 90 Minutes

Max Marks : 50

**Sem II - P1UA202T - Environmental Pollution and Human Health**General Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Name two common types of pollutants found in the air and water. K2 (2)
- 2) How can pollution affect human health? K1 (3)
- 3) Briefly explain the difference between biodegradable and non-biodegradable pollutants. K2 (4)
- 4) How do air quality standards contribute to environmental protection? K2 (6)
- 5) Discuss the impact of industrial activities on air pollution. K3 (6)
- 6) Describe the methods and instruments used in monitoring ambient air quality. K3 (9)
- 7) Investigate and elaborate on the health effects of three specific water contaminants - nitrate, fluoride, and arsenic. Discuss the pathways through which these contaminants enter the human body, their cumulative impact, and any synergistic effects. Evaluate the potential long-term health consequences associated with prolonged exposure to elevated levels of each contaminant. K4 (8)
- 8) Provide a comprehensive overview of smog, detailing its formation, types, and the specific role of different pollutants such as NO<sub>x</sub>, SO<sub>x</sub>, PM, CO, CO<sub>2</sub>, hydrocarbons, and VOCs. Explain how these pollutants contribute to the adverse effects on human health. Additionally, discuss the geographical and climatic factors that intensify smog formation. K4 (12)

**OR**

Explore the impact of organic waste on water pollution, addressing sources, pathways, and the specific contaminants released into water bodies. Discuss how these pollutants affect aquatic ecosystems and human health. Highlight any synergistic effects when organic waste interacts with other water pollutants. K4 (12)