**ST JOSEPH’S UNIVERSITY, BENGALURU - 27**

Registration Number:

Date & session:

**ENVIRONMENTAL SCIENCE – 6th SEMESTER**

**SEMESTER EXAMINATION: APRIL 2024**

**(Examination conducted in May / June 2024)**

**ES 6123 – WATER POLLUTION, RADIATION POLLUTION AND HAZARDOUS WASTE MANAGEMENT**

**(For current batch students only)**

**Time: 2 Hours Max Marks: 60**

1. **This paper contains ONE printed pages and THREE parts.**
2. **Draw diagrams wherever necessary.**

**PART – A**

**Answer any SIX of the following 6q X 2m = 12m**

1. Classify surface water pollutants.
2. What is *Itai-Itai* disease? List the symptoms.
3. Mention the causative agent and symptoms of blue baby syndrome.
4. List the characteristics of potable water.
5. Expand MLSS and MLVSS.
6. How are oils and fats separated from wastewater?
7. Differentiate wave and particle radiation.
8. What are the characteristics of hazardous wastes?

**PART – B**

**Write explanatory notes on any FOUR of the following 4q X 7m = 28m**

1. Effects and control of thermal pollution
2. Oxygen sag curve
3. Types of screens
4. Oxidation ponds
5. Dosimetry
6. Sanitary landfill

**PART – C**

**Answer ALL the questions 2q X 10m = 20m**

1. Discuss the causes, effects and control measures of fertilizer pollution.

**OR**

 Discuss the significance of disinfection of water for drinking purposes. Elaborate on any two methods of disinfection. (3+7).

1. Explain the functioning of Up-flow anaerobic digesters. List its advantages. (8+2).

**OR**

Provide a detailed account of treatment of Dairy effluents.