| 20P318 | (Pages: 1) | Name: |
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| | | Reg. No |
| THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021 | | |
| | (CBCSS-PG) | |
| (Regula | ar/Supplementary/Improver | ment) |

CC19P ESW3 C14 - ENVIRONMENTAL TOXICOLOGY AND OCCUPATIONAL HEALTH AND SAFETY

(Environmental Science) (2019 Admission onwards)

Time: Three Hours Maximum: 30 Weightage

- I. Answer any *four* questions. Each question carries 2 weightage:
 - 1. Differentiate bioaccumulation and biomagnification.
 - 2. Explain dose response curve.
 - 3. Write a short note on biological monitoring.
 - 4. Define the terms LC50 and MATC.
 - 5. What is OHSAS 18000?
 - 6. Define dosimetry.
 - 7. Comment on tissue specificity of toxicants.

 $(4 \times 2 = 8 \text{ Weightage})$

- II. Write a short essay on any *four* of the following. Each question carries 3 weightage:
 - 8. Write a note on different classes of environmental pollutants.
 - 9. Distinguish lethal, sub-lethal and chronic tests.
 - 10. Briefly explain occupational health and safety considerations in waste treatment plants.
 - 11. What are biomarkers and bioindicators? Explain with examples.
 - 12. List out the metabolic and biochemical impacts of environmental contaminants.
 - 13. Comment on ergonomics.
 - 14. Discuss environmental risk assessment methods.

 $(4 \times 3 = 12 \text{ Weightage})$

- III. Write a long essay on any *two* of the following. Each question carries 5weightage:
 - 15. Discuss in detail occupational health hazards and safety considerations.
 - 16. Enumerate and discuss the health problems in different types of industries.
 - 17. Expalin environmental contamination related diseases and preventive measures.
 - 18. Give an account of the effects of environmental toxicants at cellular, organismic, population and ecosystem levels with examples.

 $(2 \times 5 = 10 \text{ Weightage})$