22ESP104

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2022
(First Semester)

Branch – **ENVIRONMENTAL SCIENCE**

ENVIRONMENTAL TOXICOLOGY AND HEALTH

Time: Three Hours Maximum: 50 Marks

SECTION-A (5 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (5 x 1 = 5)

1. Who is called as father of modern toxicology?
   (i) Paracelsus (ii) Thomas Stevenson
   (iii) Mathieu Orfila (iv) Alexander Oscar Gettler

2. Heavy metals are so called, because they are
   (i) Denser than carbon atom (ii) Denser than water
   (iii) Denser than other metallic elements (iv) None of these

3. Term used for, amount of material used at once to cause 50% death in test animals.
   (i) LC_{50} (ii) ED_{50}
   (iii) LD_{50} (iv) EC_{50}

4. Asbestosis leads to affect.
   (i) Kidney (ii) Lungs
   (iii) Pancrease (iv) Endocrine system

5. ERA stands for…
   (i) Environmental Risk Assessment (ii) Ecological Risk Assessment
   (iii) Evolutionally Risk Assessment (iv) Economical Risk Assessment

SECTION - B (15 Marks)
Answer **ALL** Questions
ALL questions carry **EQUAL** marks (5 x 3 = 15)

6. a) Elucidate on various branches of toxicology.
   OR
   b) Briefly describe about the types of toxicity.

7. a) Explain the biomagnification of toxicant with an example.
   OR
   b) Explain in brief about teratogens and mutagens with examples.

8. a) How bioassay tests help for toxicological studies?
   OR
   b) Explain the significance of Threshold Limit Value (TLV).

9. a) State the symptoms of farmer's lung disease.
   OR
   b) Write short note on nephrotoxicity.

10. a) Write a short description about any one mechanism of detoxification.
    OR
    b) Briefly explain about hazard identification.

Cont…

SECTION -C (30 Marks)

Answer **ALL** questions
ALL questions carry **EQUAL** marks (5 x 6 = 30)

11. a) Critically analyze the routes of entry of eco toxicants.

OR

b) What are xenobiotics? Write detailed note on xenobiotics emphasizing pharma industry.

12. a) Outline the impact of modern intensive agricultural practices on environment.

OR

b) Elucidate the sources and impact of Cd on environment.

13. a) Explain the Dose Response Relationship curves with examples.

OR

b) Differentiate the synergism and antagonism with suitable examples.

14. a) Describe the role of WHO in occupational health management.

OR

b) Differentiate the hepatotoxicity and neurotoxicity with examples.

15. a) Describe about environmental health hazard in India with a case study.

OR

b) Outline the salient features of risk characterization and risk management.

Z-Z-Z

END