

**MEV-004**

**POST GRADUATE DIPLOMA IN  
ENVIRONMENTAL AND OCCUPATIONAL HEALTH**

**2022 – 2023**

**MEV-004: Environmental Toxicology**



**School of Interdisciplinary  
and Trans-disciplinary Studies  
Indira Gandhi National Open University  
Maidan Garhi, New Delhi-110068**

**ASSIGNMENT**  
**For**  
**POST GRADUATE DIPLOMA IN ENVIRONMENTAL AND**  
**OCCUPATIONAL HEALTH**

**MEV-002: ENVIRONMENTAL TOXICOLOGY**

**Programme: PGDEOH**  
**Course Code: MEV-004/2022-2023**

Dear Learners,

You are required to do one assignment for each Course (Courses 1-5, Course 6 being a project paper and any two elective courses out of four) of the PG Diploma in Environmental and Occupational Health program. Each assignment is a Tutor Marked Assignment (TMA) and carries 100 marks. Each assignment covers the entire course.

**Aims:** This TMA is concerned mainly with assessing your application and understanding of the course material. You are not required to reproduce chunks of information from the course material but to apply the information you have acquired during study. This assignment aims to teach as well as to assess your performance. Please ensure that you read all the units of the course. Do make points as you go along. If there is anything you do not understand, please ask the Counsellors at your Study Centre for clarification. Once you can do the assignment satisfactorily, you will be ready to take the Term-end exam with confidence.

**Instructions:** Before attempting the assignment, please read the following instructions carefully.

1. Read the detailed instructions about the assignment given in the Programme Guide.
2. Write your Enrolment Number, Name, Full Address and Date on the top right corner of the first page of your response sheet(s).
3. Write the Course Title, Assignment Number, and the Name of the Study Centre you are attached to, in the centre of the first page of your response sheet(s).

The top of the first page of your response sheet should look like this:

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**ENROLMENT NO**.....  
**NAME**.....  
**ADDRESS**.....  
**COURSE TITLE:**.....  
**ASSIGNMENT NO:**.....  
**STUDY CENTRE:**.....**DATE:** .....

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1. Use only A4 paper size for your assignment and tag all the pages carefully.
2. Write the relevant question number with each answer.

3. You should write the answer in your own handwriting.
4. **Submission:** The completed assignment should be sent to the Coordinator of the Study Centre allotted to you. Please read the instructions given in your Programme Guide.
5. These assignment questions are valid for the January 2022 session and July 2022 session.

Now read the following guidelines carefully before answering the questions.

### **GUIDELINES FOR TMAs**

You will find it useful to keep the following points in mind:

1. **Planning:** Read the questions carefully. Go through the points on which they are based. Make some points regarding each question and then rearrange these in a logical order. And please write the answers in your own words. Do not reproduce passages from the units.
2. **Oganisation:** Be a little more selective and analytic before drawing up a rough outline of your answer. In an essay-type question, give adequate attention to your introduction and conclusion. The introduction must offer your brief interpretation of the question and how you propose to develop it. The conclusion must summarize your response to the question. During your answer, you may like to make references to other texts or books as this will add some depth to your analysis.

**Make sure that your answer:**

- (a) is logical and coherent;
  - (b) has clear connections between sentences and paragraphs;
  - (c) is written correctly giving adequate consideration to your expression, style and presentation;
  - (d) Does not exceed the number of words indicated in the question.
1. **Presentation:** Once you are satisfied with your answers, you can write down the final version for submission, writing each answer neatly and underlining the points you wish to emphasize.

**Remember that you must submit your assignments before you can appear for the Term End Exams. Please remember to keep a copy of your completed assignment, just in case the one you submitted is lost in transit.**

**Good luck with your work!**

# MEV-004: ENVIRONMENTAL TOXICOLOGY

## TUTOR MARKED ASSIGNMENT

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Course Code	: MEV-004
Course Title	: Environmental Toxicology
Assignment Code	: MEV-004/TMA-01/2022-2023
Coverage	: All Blocks

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Maximum Marks 100

Attempt any five questions. All questions carry equal marks.

5x20=100

1. Define Environmental toxicology. Describe some sources of toxicants harmful to the environment and human health.
2. Describe the various exposure routes of toxicants in the human body with suitable examples.
3. What are chemical toxicants? Describe in detail the exposure classes with reference to air, water and soil pollutants.
4. Describe carcinogens and their effects on the human body.
5. Write short notes on:
  - a) Mutagens
  - b) Detoxification
6. Explain the various sources of teratogens and their effects. Describe the process of teratogenesis and the mechanism of action.
7. Explain the use of biomarkers and biosensors in cytotoxicity and genotoxicity prevention.