

**POST GRADUATE DIPLOMA
IN ENVIRONMENT AND SUSTAINABLE DEVELOPMENT
(PGDESD)**

**It is compulsory to submit the assignment before
filling in the examination form.**

(Valid from 1st January 2025 to 31st December, 2025)

Tutor Marked Assignments (TMA) for

MED-001

MED-002

MED-003

MED-004



**School of Sciences
Indira Gandhi National Open University
Maidan Garhi, New Delhi-110068**

(2025)

Dear Student,

This booklet contains the assignments for MED-001, MED-002, MED-003 and MED-004. Each course has **one** assignment, which you need to complete and send us at the given address.

There will be one assignment for each course. You have to complete the assignments on time. Assignment Submission Deadlines are as follows:

Cycle	Course	Deadlines
January	MED-001 to MED-004 MED-005 to MED-008	March 31 of the same year September 30 of the same year
July	MED-001 to MED-004 MED-005 to MED-008	September 30 of the same year March 31 of the next year

You will not be allowed to appear for the term-end examination for a course if you do not submit the assignment for each course within the deadlines given above. If you appear in the term-end examination of a course without submitting its assignment, the result of the term-end examination is liable to be cancelled/withheld. It is compulsory to submit the assignment before filling in the examination form.

The assignments constitute the continuous component of the evaluation process and have 30% weightage in the final grading. You need to score 40% marks in assignments for each course in order to clear the continuous evaluation component.

Instructions for Formatting Your Assignments

1. You should specify clearly on the first page of all your assignment responses the course code, course title, assignment code, your enrolment number, name and address in the given format:

ENROLMENT NO.:

NAME :

ADDRESS:

.....

COURSE CODE:

COURSE TITLE:

ASSIGNMENT CODE:

STUDY CENTRE CODE: DATE:

PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND AVOID DELAY.

2. **The Assignment Response should be hand-written.** Use only A-4 or foolscap size writing paper (but not of very thin variety) for writing your answers.

3. Leave at least 4 cm margin on the left, top and bottom of your answer sheet for the evaluator's comments.
4. Your answers should be brief, precise and in your own words. **Please do not copy the answers from the study material.**
5. Serious action will be taken if you copy the Assignment Response from any other student.
6. While answering the questions, clearly indicate the question number along with the part being answered. Recheck your work before submitting it.

We recommend that you retain a copy of your assignment response to avoid any unforeseen situation.

Send your completed assignments to: Coordinator of your Study Centre of the respective Regional Centre where you are enrolled

Please write on the envelope "**Assignment Response of**" (Course Code).

Wishing you all good luck!

TUTOR MARKED ASSIGNMENT
MED-001: Understanding the Environment

Course Code: MED-001
Assignment Code: MED-001/TMA/2025
Maximum Marks: 100

Note: * **This assignment is based on the entire course.**
* **All questions are compulsory. Marks for the questions are shown within brackets on the right-hand side.**
* **Please answer in your own words; do not copy from the course material.**
* **Write the answers in about 250 words for 5 marks questions and not exceeding 500 words for 10 marks questions.**

1. Describe the process of formation of soil. Write a note on El-Nino. (7+3=10)
2. Discuss the physical characteristics of standing water bodies. (10)
3. a) Give an account of the different mass extinctions that occurred in geological time scale. (5+5=10)
b) Discuss the vegetation and animal life observed in Savannas.
4. Give a broad overview of the adaptations of organisms in estuarine systems. (10)
5. What do you mean by ecological pyramids? Discuss their different types with examples. How is an ecosystem self-regulated? (2+5+3=10)
6. Describe the operation of phosphorus cycle with proper illustrations. Discuss the different patterns of distribution of a population. (5+5=10)
7. Explain the different types of inter-specific interactions in a population with proper examples. (10)
8. Write a broad overview on the evolution of *Homo sapiens*. How did the agriculture-based urban societies emerge? (6+4=10)
9. Elucidate the various causes of environmental degradation. (10)
10. What are the different types of water pollutants? Discuss the different parameters for estimating water quality. (5+5=10)

TUTOR MARKED ASSIGNMENT
MED-002: Sustainable Development: Issues and Challenges

Course Code: MED-002
Assignment Code: MED-002/TMA/2025
Maximum Marks: 100

- Note:** * **This assignment is based on the entire course.**
* **All questions are compulsory. Marks for the questions are shown within brackets on the right-hand side.**
* **Please answer in your own words; do not copy from the course material.**
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1. Critically analyse strengths and weaknesses of various approaches to sustainable development. (10)
2. Discuss the disadvantages of unsustainable development in industrialization? Describe methods to overcome them. (10)
3. How can sustainable use of natural resources help achieve sustainable development? (10)
4. Describe various state and local development initiatives to address the inequality. Substantiate your answer with suitable examples. (10)
5. “We discharge our roles following a particular lifestyle that may not be compatible with sustainable development” Justify the statement with suitable examples from our daily life. (10)
6. Explain the various civil society initiatives for the protection of environment and sustainable development. (10)
7. Explain the following in about 250 words each: (4x5 = 20)
 - (a) Indicators of sustainable Activities
 - (b) Achieving Sustainable Livelihood
 - (c) Social consequences of deforestation.
 - (d) Concept of carrying capacity.
8. Explain the following in about 250 words each: (4x5 = 20)
 - (a) Cooperatives and Sustainable Development
 - (b) Concept of Harnessing Technology in Sustainable Development
 - (c) Initiatives of the South Asian Countries towards the betterment of the environment.
 - (d) Integration of Scientific and Traditional Knowledge for Sustainable Development.

TUTOR MARKED ASSIGNMENT
MED-003: Energy and Environment

Course Code: MED-003
Assignment Code: MED-003/TMA/2025
Maximum Marks: 100

- Note:**
- * **This assignment is based on the entire course.**
 - * **All questions are compulsory. Marks for the questions are shown within brackets on the right-hand side.**
 - * **Please answer in your own words; do not copy from the course material.**
 - * **Write the answers in about 250 words for 5 marks questions and not exceeding 500 words for 10 marks questions.**
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1. Discuss the role of individuals in effecting energy savings and developing energy infrastructure. (10)
2. Explain the basic principle of electricity generation underlying the nuclear power plant. (10)
3. Highlight a few measures that can be used to save energy in the commercial and industrial sectors in India. (10)
4. Explain the working of a bio gas plant with neat diagram. (10)
5. Examine the perspective of developing countries regarding energy vis-à-vis environment. (10)
6. Elaborate on Power to the people: A Ten-Point agenda for change. (10)
7. What is home energy audit? Discuss the different aspects of conservation of energy in homes. (10)
8. Describe the process of extracting crude oil in an oil well and refining it in petroleum refineries. (10)
9. Write short notes on the following: (4x5=20)
 - (i) Limitations of Clean Development Mechanism
 - (ii) Benefits of Demand Side Management
 - (iii) Advantages and limitations of small hydropower plant
 - (iv) Solar Photovoltaic Technology

TUTOR MARKED ASSIGNMENT
MED-004: Towards Participatory Management

Course Code: MED-004
Assignment Code: MED-004/TMA/2025
Maximum Marks: 100

Note: * **This assignment is based on the entire course.**
* **All questions are compulsory. Marks for the questions are shown within brackets on the right-hand side.**
* **Please answer in your own words; do not copy from the course material.**

1. Discuss the PRA as basic tools for participatory management and how are these tools used in the development of participatory projects? Support your answer with a successful example of participatory management. (10)
2. a) What were the main features of the British colonial administration and what were their results? (5)
b) What are the various problems of representative approach as in Pakistan's development? Give any two important features of the Agha Khan Rural Support Programme (AKRSP). (5)
3. What are the different models of participatory management in South Asia? Elaborate any two of them. (10)
4. Briefly give the details of Orangi Pilot Project. (10)
5. a) Discuss the role of women in environment and development. (5)
b) How does and institution differ from an organization in its structure and objectives? (5)
6. Elaborate on the functions of youth in development work as suggested by the Common Wealth Youth Programme (CYP). (10)
7. a) Describe the organizational arrangement of SACEP. (5)
b) What is participation? Explain with suitable figures the participatory triangles. (5)
8. Explain the ecological role of mountains also explain the "National Biodiversity Strategy and Action Plan" in India. (10)
9. a) What are the roles of different agencies and institutions concerned with mountains towards sustainable mountain development? (5)
b) What are the drawbacks of social forestry? (5)
10. a) What is the importance of wetland in our country and how it should be conserved? (5)
b) What are the characteristics of coastal zones? (5)