

**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 2023 to 31st December, 2023)

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**

(2023)

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.

1. **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.
2. Leave at least 4 cm margin on the left, top and bottom of your answer sheet for the evaluator's comments.
3. Your answers should be brief, precise and in your own words. **Please do not copy the answers from the study material.**

4. Serious action will be taken if you copy the Assignment Response from any other student.
5. 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/2023
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. What are sediments? Explain the processes involved in the formation of soils. (2+8=10)
2. Explain with examples how minor atmospheric gases and aerosols play important roles in the environment. (10)
3. Distinguish between the following terms giving an example of each: (4x5=20)
 - (i) Benthic and pelagic organisms
 - (ii) Primary and secondary air pollutants
 - (iii) Holozoic and saprophytic nutrition
 - (iv) Lentic and lotic habitats
4. Discuss the characteristics and significance of bryophyte and tracheophyte. (5+5=10)
5. Define the terms food chains and food webs. Discuss in detail about detritus food chains. (4+6=10)
6.
 - (i) Distinguish between Net Primary Productivity (NPP) and Net Community Productivity (NCP). (5)
 - (ii) What do you understand by ecosystem resistance and resilience? Give examples. (5)
7. What are biogeochemical cycles? Describe the nitrogen cycle using a neat diagram. (2+8=10)
8. Write short notes on the following: (4x5=20)
 - (i) Thermal properties of water
 - (ii) Intra-specific community interactions
 - (iii) Flow of energy in ecosystems
 - (iv) Causes of land degradation

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

Course Code: MED-002
Assignment Code: MED-002/TMA/2023
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. Critically analyse the strengths and weaknesses of various approaches to sustainable development. Elucidate your answer with suitable examples. (10)
2. “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)
3. Describe how traditional knowledge and modern scientific knowledge can be integrated to achieve sustainable development. (10)
4. How can sustainable use of natural resources help achieve sustainable development? (10)
5. Analyse the roadblocks to global initiatives in protecting the global environment. (10)
6. Describe various state and local development initiatives to address inequality. Substantiate your answer with suitable examples. (10)
7. Explain the following in about 250 words each: (5x4=20)
 - (a) Concept of carrying capacity.
 - (b) Initiatives of the South Asian countries towards the betterment of the environment.
 - (c) Sustainable Agriculture Practices.
 - (d) Innovative practices in Sustainable Development of Water and Energy Resources.
8. Explain the following in about 250 words each: (5x4=20)
 - (a) Cooperatives and Sustainable Development
 - (b) Sustained Livelihood
 - (c) Concept of Harness Technology in Sustainable Development.
 - (d) Sustainable and non-sustainable activities

**TUTOR MARKED ASSIGNMENT
MED-003: Energy and Environment**

**Course Code: MED-003
Assignment Code: MED-003/TMA/2023
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. Explain how the Earth's carrying capacity can be estimated using various parameters. (10)
 2. Explain the basic principle of electricity generation underlying the thermal and the nuclear power plant. (5+5=10)
 3. Analyse the impact of liberalisation and privatisation of the energy sector on the people of developing countries. (10)
 4. Highlight a few measures that can be used to save energy in the residential and industrial sectors in India. (5+5=10)
 5. Explain the demand side, end-use, and energy-services approach in energy economics. (10)
 6. Analyse energy in relation to sustainability and explain the requirements of governance and finance for sustainable energy. (10)
 7. Discuss the role of individuals in effecting energy savings and developing energy infrastructure. (10)
 8. (i) Discuss the measures that can help in achieving the goals of energy policy. (5)
(ii) Discuss the measures that need to be taken for sustainable energy use in the future. (5)
 9. Write short notes on the following: (4x5=20)
 - (i) Applications of solar energy
 - (ii) Advantages and limitations of small hydropower plant
 - (iii) Applications of biomass technologies
 - (iv) Criteria to set up wind energy system

TUTOR MARKED ASSIGNMENT
MED-004: Towards Participatory Management

Course Code: MED-004
Assignment Code: MED-004/TMA/2023
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. What is the process of community development? Which are the two forces from which it has evolved? Who are the stakeholders in this connection? (3+4+3=10)
 2. Why is the term Participatory rural appraisal (PRA) misleading? Which other research methods and techniques are involved in it? Which other research methods use PRA for conducting social and developmental research? (4+3+3=10)
 3. Give the background and evolution of participatory research, management and development approaches. (10)
 4. Discuss briefly the organizational model of participatory management which is in context with south Asia. Also, explain the three “fits” in the context of a strategy for rural development based on this model. (10)
 5. Give the salient features of community organisation and discuss how malpractices are a threat to it. Compare the Orangi Pilot Project (OPP) programmes with other relevant government programmes. (5+5=10)
 6. What were the solutions that were tried by innovative development agencies in Pakistan so that the hardships of women could be reduced? What was done to counteract the feeling of powerlessness by women? Give an example of a programme that was started to issue these problems. (10)
 7. Discuss the errors of field practice and ethics in the context of participatory rural approach (PRA) practices. (10)
 8. Mention any five important milestones of SACEP. What are the future projects of SACEP? (10)
 9. What is participatory forestry? Briefly discuss Joint Forest management (JFM) in India and explain how participatory management can affect the life of people residing at the periphery of forest area. (10)
 10. What are the remedial measures to the threats to mangroves in India? Give the major conservational strategies of the Government of India to protect it. (10)
-