

**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 2024 to 31st December, 2024)

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**

(2024)

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/2024
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. Define the terms environment and ecosystem? Describe the concept of biosphere. (4+6=10)
2. Explain the processes that are involved in the formation of soils. (10)
3. Distinguish between the following terms giving an example of each: (4x5=20)
 - (i) Oomycetes and Zygomycetes
 - (ii) Arthropoda and Echinodermata
 - (iii) Photoautotrophic and Photoheterotrophic
 - (iv) Littoral Zone and Pelagic Zone
4. Discuss the characteristics of Lotic Habitats. (10)
5. Define the terms food chains and food webs. Discuss in detail about detritus and supplementary food chains. (4+6=10)
6.
 - (i) Discuss the causes of environmental degradation. (5)
 - (ii) Discuss the various parameters used for testing water quality. (5)
7. What are geochemical cycles? Describe the carbon cycle using a neat diagram. (2+8=10)
8. Write short notes on the following: (4x5=20)
 - (i) El-Niño Phenomena
 - (ii) Mass Extinctions
 - (iii) Structure of a coral reef
 - (iv) Ecosystem resistance and resilience

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

Course Code: MED-002
Assignment Code: MED-002/TMA/2024
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. Describe the concept of sustainable development with suitable examples. Explain the major issues and challenges which confront sustainable development? (10)
2. Differentiate between inter-generational and intra-generational equity and justice with suitable examples. Discuss by giving examples how gender disparity can hamper environment protection and sustainable development. (10)
3. Explain the key governance issues to change the rules and power structure towards a positive and sustainable livelihood. (10)
4. Discuss various regional issues related to environment. Assess the initiatives taken towards environmental protection to achieve sustainable development. (10)
5. Explain the Environmental Legislation and its implementation in India. (10)
6. Describe various indicators of inequality with suitable examples. (10)
7. Explain the following in about 250 words each: (4x5 = 20)
 - (a) Cooperatives and Sustainable Development
 - (b) Community knowledge in Sustainable Development
 - (c) Road blocks to global initiatives
 - (d) Regional initiatives for environmental protection.
8. Explain the following in about 250 words each: (4x5 = 20)
 - (a) Community-based Civil Society Initiatives on Sustainable Development.
 - (b) Integration of Scientific and Traditional Knowledge for Sustainable Development.
 - (c) Sustainable Agriculture Practices.
 - (d) Innovative Practices in Sustainable Development of Water Resources.

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

**Course Code: MED-003
Assignment Code: MED-003/TMA/2024
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. What is solar photovoltaic technology? Discuss its underlying principle and applications. (5+10=15)
 2. Explain how the carrying capacity of the Earth can be estimated using various parameters. (10)
 3. Give a brief description of the future projection of world energy demand as per EIA International Energy Outlook2004. (10)
 4. Discuss the advantages and limitations of Clean Development Mechanism to help meet the challenge of combating climate change. (5+5=10)
 5. Discuss the factors that need to be kept in view while formulating the energy policy. (10)
 6. What is energy economics? Explain the factors that need to be considered in energy economics. (2+8=10)
 7. Describe the positive and negative impacts of the solar energy technology on the environment. (5)
 8. Discuss the working of a wind energy system with the help of a suitable diagram. (5)
 9. Discuss the advantages and limitations of small hydropower plant. (5)
 10. Write short notes on the following: (4x5=20)
 - (i) Functions of the components of a thermal power plant
 - (ii) Benefits of carbon taxation
 - (iii) Working of a biogas plant
 - (iv) Fuel switching
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TUTOR MARKED ASSIGNMENT
MED-004: Towards Participatory Management

Course Code: MED-004
Assignment Code: MED-004/TMA/2024
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. Discuss the philosophy of the participatory approach. Discuss how participatory rural appraisal techniques are used in the development. (3+4+3=10)
2. a) When was the Community Development (CD) Programme launched in India? What were the various ways in which it was the first of its kind to improve the people's participation? (5)
b) What are the various problems of departmental approach as in Pakistan's development? Give any two important features of the Agha Khan Rural Support Programme (AKRSP). (5)
3. What are the aims, mission and functions of SACEP? Give its organizational arrangement also. (10)
4. With the help of a successful example of a women's movement in protecting the environment discuss the role of women in environment and development. (10)
5. a) Is hierarchy appropriate for organizing? In what way it may be lessened? (5)
b) The following statement was made by a Chipko movement activist: "...The women's and ecology movements are therefore one, and are primarily counter-trends to a patriarchal maldevelopment." What is your opinion on the above comment? (5)
6. Describe how the model "Reversals in Learning" help farmers in sustainable and equitable development. (10)
7. a) What are the different types of financial assistance received by SACEP? (5)
b) What are the policy directives of the trends in policy in Joint Forest management? (5)
8. Discuss how Orangi Pilot Project can help to build a model urban developed unit in our country. (10)
9. a) How can Participatory Forest Management help in the development of both, the people living on the edge of forest and the forest. (5)
b) Describe how tourism and urbanization are destroying the mountain ecosystem. Suggest what measures are to be taken for sustainable mountain development (5)

10. a) Differentiate between PIM and IMT. (2)
- b) How can coastal community's participation help in ICM process? (3)
- c) What is the importance of wetland in our country and how it should be conserved? (5)
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