

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

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

(Valid from 1<sup>st</sup> January 2018 to 31<sup>st</sup> December, 2018)

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

(2018)

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 on the given address.

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

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

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ENROLMENT NO.: .....

NAME : .....

ADDRESS : .....

.....

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COURSE CODE: .....

COURSE TITLE: .....

ASSIGNMENT CODE: .....

STUDY CENTRE CODE: ..... DATE: .....

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PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO 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/2018**  
**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	a) Discuss the importance of environment in our life and why we should be concern about its conservation.	5
	b) Describe the various stratification found in the atmosphere.	5
2	a) How does EL.Nino phenomena affect the climatic condition of Asia?	5
	b) What are biogeochemical cycles? Explaining the general features describe the nitrogen cycle or phosphorous cycle with the help of neat diagram.	5
3	Distinguish between the following: i) Biosphere and ecosystem ii) Primary and secondary air pollutant iii) Sedimentary and metamorphic rocks iv) Symbiotic and mutualistic organisms v) Temperate and tropical rainforests	(2x5=10)
4	i) How could you have 'zero garbage generation' in a city? Explain with the help of a diagram. ii) Discuss the effects of 'natural global warming'. iii) Discuss the implications of people overpopulation and consumption overpopulation.	4+3+3=10
5	a) List the various biomes with their main characteristics. What are the factors that lead to their formation? What are the major threats to each of them? b) Why are coral reefs considered to be important yet fragile ecosystems?	6+4=10
6	Define a food web? How are food webs related to the stability of an ecosystem? With an example explain how do pesticides or other toxic substances bioaccumulate in the ecosystem.	10
7	a) List any four major sources of groundwater pollution. b) Explain as to how the microorganisms and the organic matter help in improving soil fertility. c) Discuss the impacts of deforestation and intensive cultivation on the environment.	2+3+3=10
8	Answer the following questions in not more than 150-200 words. (i) How do human activities affect the hydrological cycle? (ii) Explain the flow of energy through the ecosystem with the help of a diagram. (iii) Why grasslands have nutrient rich soil while rainforest soils low in nutrient content? (iv) Give reasons why does an area in a rain shadow often become a Desert.	5x4=20
9.	Write notes on the following: (i) Species abundance (ii) Effects of desertification (iii) Carrying capacity (iv) Pyramid of energy	2.5x4=10

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

**Course Code: MED-002**  
**Assignment Code: MED-002/TMA/2018**  
**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? (20)
  2. Describe how traditional knowledge and modern scientific knowledge can be integrated to achieve sustainable development. (20)
  3. How can sustainable use of natural resources help achieve sustainable development? (10)
  4. “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. (20)
  5. Analyse the roadblocks to global initiatives in protecting global environment. (10)
  6. Explain the following in about 250 words each: (4x5=20)
    - (a) Achieving sustainable livelihood
    - (b) Role of North-South divides in global environmental issues.
    - (c) Concept of Harness Technology in Sustainable Development.
    - (d) Social consequences of deforestation.
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**TUTOR MARKED ASSIGNMENT  
MED-003: Energy and Environment**

**Course Code: MED-003  
Assignment Code: MED-003/TMA/2018  
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. Explain the economics of demand and supply of energy. (10)
  2. How do policy measures adopted by government affect energy used by a country? (10)
  3. What is solar photovoltaic technology? Discuss its underlying principle and applications. (10)
  4. What do you understand by home energy audit? Explain the different aspects of conservation of energy in homes. (10+10=20)
  5. Explain how electricity is produced in coal-based thermal power plants and in nuclear power plants. (10)
  6. Discuss the measures that need to be taken for sustainable energy in future. (10)
  7. Explain the working of a bio gas plant. (10)
  8. Write short notes on the following: (4x5=20)
    - a. Solar Energy
    - b. Environmental Hazards of Nuclear Energy
    - c. Alternative energy supply
    - d. Rebound Effect
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**TUTOR MARKED ASSIGNMENT**  
**MED-004: Towards Participatory Management**

**Course Code: MED-004**  
**Assignment Code: MED-004/TMA/2018**  
**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. (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. a) With reference to South Asia discuss the collectivist/socialist model of participatory management. (5)  
b) Discuss the ways the community organisation may be saved from dominance of powerful and prosperous local people. (5)
  4. a) Why is it most important to involve women in the planning, operation and maintenance of water supply? (5)  
b) What are the difficulties which women extension agents often encounter at the village level? How can the problems be solved? (5)
  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. What are the skills that youth workers need to have in a treatment model? How is it different from those in advocacy model? (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. How has tourism in Himalayas destroyed the mountain ecosystems? How could the problem be solved by sustainable mountain development? (10)
  9. Elaborate the different categories of coastal areas with suitable examples. How would identification and designation of EIAs help in sustainable development of these areas? What would be the role of the State/UT Authorities in this? (10)
  10. a) How sustainable fisheries development could be done in Loktak Lake? What are the major steps taken by the government to promote total management of the lake? (5)  
b) What threats are experienced by mangroves in India? (5)

