

**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 2016 to 31<sup>st</sup> December, 2016)**

Tutor Marked Assignments (TMA) for

**MED-001**

**MED-002**

**MED-003 (Earlier MED-009)**

**MED-004**



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

**(2016)**

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: .....

.....

.....

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/2016**  
**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. Write in about 500 words how the human population growth has/is affecting the environment. Explain why we should be concerned about the state of our environment. (10+5=15)
2. a) With the help of a diagram, describe the structure of a coral reef. (5)  
b) How many different types of coral reefs are found? Name the main reef building corals. (6)  
c) Why are coral reefs considered to be important yet fragile ecosystems? (4)
3. a) What is the difference between a food chain and a food web? Illustrate and describe the different types of food chains with examples. (10)  
b) Describe the relationship between the complexity of a food web and stability of an ecosystem. (5)
4. Distinguish between : (4×5=20)
  - (i) Bacteria and virus
  - (ii) Monocot and dicot plants
  - (iii) Primitive and present atmosphere
  - (iv) Neuston and Pelagic organisms
  - (v) Primary and secondary air pollutants.
5. Discuss the following in not more than 250 words: (4×5=20)
  - (i) Thermal properties of water
  - (ii) Effect of tides and salinity on the estuarine environment
  - (iii) 6 coil model of formation of climatic zones on Earth
  - (iv) Water quality parameters
  - (v) Impact of early agricultural societies on the environment
6. Draw the nitrogen cycle of nature. Describe briefly each stage and explain why nitrogen cycle is particularly important for living organisms. How is it affected by human activity in the present times? (15)

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

**Course Code: MED-002**  
**Assignment Code: MED-002/TMA/2016**  
**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. Explain major issues and challenges which confront sustainable development? (20)
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. (20)
3. Describe how traditional knowledge and modern scientific knowledge can be integrated to achieve sustainable development. (20)
4. Analyse the roadblocks to global initiatives in protecting global environment. (20)
5. Explain the following in about 250 words each: (5x4=20)
  - a) Concept of carrying capacity.
  - b) Role of North-South divides in global environmental issues.
  - c) Initiatives of the South Asian countries towards the betterment of the environment.
  - d) Concept of Harness Technology in Sustainable Development.

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

**Course Code: MED-003  
Assignment Code: MED-003/TMA/2016  
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 role of energy in economic growth of a country. How do policy measures adopted by government affect energy used by a country? (10+10=20)
2. Highlight a few measures that can be used to save energy in the commercial and industrial sectors in India. (10)
3. What is energy planning? Discuss the broad aims and benefits of energy planning. (10+10=20)
4. Discuss the issues and challenges of Rural Energy planning in India. (10)
5. Discuss the measures that need to be taken for sustainable energy in future. (10)
6. Explain the economics of demand and supply of energy. (10)
7. Write short notes on the following: (4x5=20)
  - a) Biomass Energy
  - b) Environmental Hazards of Nuclear Energy
  - c) Greenhouse Gases
  - d) Wind energy applications in India

**TUTOR MARKED ASSIGNMENT**  
**MED-004: Towards Participatory Management**

**Course Code: MED-004**  
**Assignment Code: MED-004/TMA/2016**  
**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. Define PRA and describe how commonly used PRA tools are used. How are these tools helpful in the development of projects? (2+4+4=10)
2. List any six characteristics of good governance. How does Participatory management model help in good governance? (3+3+4=10)
3. Discuss the significance of participatory approaches in empowering people for sustainable development. (10)
4. Discuss how women's participation in community decision can help in the protection of environment by giving examples. (5+5=10)
5. What are the roles of a change agent in organizational change? Discuss the varied approaches a change agent can use for the betterment of an organization. (5+5=10)
6. Describe the role of women in development and conservation of environment .How can the role of women be strengthen in environmental protection? (5+5=10)
7. Discuss how reversal in learning can give better understanding of participatory management in a project. (10)
8. Describe the role and function of youth in developmental work. (10)
9. (a) Describe the salient feature of SACEP. What are the assumptions of SACEP on which its vision in South Asia is based? (5+5=10)  
(b) Discuss how sustainable mountain development can be attained.
10. (a) Discuss the natural functions of Wetlands. Describe the reasons for Wetland loss. (5+5=10)  
(b) Elaborate your views on participatory forest management in relation to equity in benefit sharing and equity in participation.