

**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 to December, 2015)

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**

(2015)

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 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

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 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/2015
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. Explain the difference between the following giving an example of each: (4×5=20)
 - (i) Chemical and physical weathering of rocks
 - (ii) Benthic and pelagic organisms
 - (iii) Predation and competition among species
 - (iv) Lotic and lentic aquatic habitats
 - (v) Holozoic and saprophytic nutrition

2. (i) Define GPP, NPP and SP. Why does a young plantation have a high NPP/GPP ratio as compared to a mature tropical forest? (4×5=20)
 - (ii) What is the role of winds in global heat distribution?
 - (iii) What are the key features of the flora and fauna of the polar region?
 - (iv) What are the factors that contribute to noise pollution? What are its effects and how can it be managed?

3. a) List any four major sources of groundwater pollution. (4)
b) Discuss how water pollution: (a) causes eutrophication, (b) affects human health. (6)

4. Draw labeled diagrams of the nitrogen cycle and sulphur cycle. Identify the reservoirs in each cycle and clearly list out the similarities and differences between the two cycles. (10)

5. a) What information can be given by a pyramid of energy? (2)
b) Draw a neat diagram to show the flow of energy in a forest ecosystem. Use examples other than those given in your course material. (8)

6. Explain species dominance, species diversity and species abundance. How do these features influence the biological structure in a community? (10)

7. What are the four basic characteristics common to any ecosystem? In the context of a tropical forest ecosystem, explain each characteristic. (10)

8. a) What are the implications of people overpopulation and consumption overpopulation? Why is it important to contain our population growth? (6)
b) Why is desertification considered to be an extreme form of land degradation? In your opinion can the effects of desertification be reversed? (4)

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

Course Code: MED-002
Assignment Code: MED-002/TMA/2015
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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Answer any five questions in about 500 words each. Attempt at least two questions from each. Each question carries 20 marks.

SECTION-I

1. Explain the concept of sustainable development. What are the objectives of sustainable development?
2. What are the major issues and challenges which confront sustainable development?
3. Discuss the disadvantages of unsustainable development in industrialization? Describe methods to overcome them.
4. What are the roadblocks to global initiatives in protecting global environment?
5. Explain the following in about 250 words each:
 - a) Social consequences of deforestation.
 - b) Role of North South divide in global environmental issues.

SECTION-II

6. Describe how traditional knowledge and modern scientific knowledge can be integrated to achieve sustainable development.
7. Discuss SAARC Initiatives for achieving sustainable development.
8. Discuss by giving examples how gender disparity can hamper environment protection and sustainable development.
9. How can sustainable use of natural resources help achieve sustainable development.
10. Comment on the following in about 250 words each:
 - (a) Montreal Protocol on depletion of ozone layer.
 - (b) Concept of carrying capacity.

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

**Course Code: MED-003
Assignment Code: MED-003 /TMA/2015
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. (a) Discuss the role of energy in economic growth of a country. (10)
- (b) Discuss the production technologies used for renewable energy sources. (10)
- (c) Examine the perspective of developing countries regarding energy vis-à-vis environment. (10)
2. (a) Describe energy planning in context of developing countries. (10)
- (b) Discuss the energy policies in relation to International environment. (10)
3. (a) Explain the economic approaches to tackle energy problem. (15)
- (b) Discuss the use of energy efficient appliances and buildings. (10)
4. (a) What is solar photovoltaic technology? Discuss its underlying principle and applications. (5+10)
- (b) Explain the potential of wind energy in India. (10)

TUTOR MARKED ASSIGNMENT
MED-004: Towards Participatory Management

Course Code: MED-004
Assignment Code: MED-004/TMA/2015
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. Define PRA and describe the commonly used PRA tools. How are these tools helpful in the development of projects? (2+4+4)
2. List any six characteristics of good governance. How does Participatory management model help in good governance? (3+3+4)
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)
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)
6. Describe the role of women in development and conservation of environment. How can the role of women be strengthened in environmental protection? (5+5)
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. (i) Describe the salient feature of SACEP. What are the assumptions of SACEP on which its vision in South Asia is based? (5+5)
(ii) Discuss how sustainable mountain development can be attained.
10. (a) Discuss the natural functions of Wetlands. Describe the reasons for Wetland loss. (5+5)
(b) Elaborate your views on participatory forest management in relation to equity in benefit sharing and equity in participation.