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

(Valid from January 01, 2009 to December 31, 2009)

Tutor Marked Assignments (TMA) for

MED-001 MED-002 MED-003 (Earlier MED-009) MED-004



#### INDIRA GANDHI NATIONAL OPEN UNIVERSITY Maidan Garhi New Delhi – 110 068

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<br>MED-005 to MED-008 | May 31 of the same year Nov. 30 of the same year    |
| July    | MED-001 to MED-004<br>MED-005 to MED-008 | Nov. 30 of the same year<br>May 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.

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: |                                   |

PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

- 2. 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.
- 3. Leave at least 4 cm margin on the left, top and bottom of your answer sheet for the evaluator's comments.
- 4. Your answers should be brief, precise and in your own words. **Please do not copy the answers** from the study material.
- 5. Serious action will be taken if you copy the Assignment Response from any other student.
- 6. 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**

\* All questions are compulsory. Marks for the questions are shown on the right hand side.

Course Code: MED-001
Assignment Code: MED-001/TMA/2009

**Note:** \* This assignment is based on the entire course.

Maximum Marks: 100

|   | * Please answer in your <b>own words</b> ; do not copy from the course material.   |       |
|---|--|-------|
|   |  |       |
| 1 | a) What are the characteristics of the following types of rocks?   | (5x3) |
|   | Igneous, Sedimentary and Metamorphic.  |       |
|   | b) How does thermal stratification affect a water body?  |       |
|   | c) Make blocks and arrows diagram of a supplementary food chain.   |       |
|   | d) List the components that add up to give the total energy content of a trophic level.                                    |       |
|   | e) What accounts for the high productivity in a tropical forest?   |       |
| 2 | Write the units of the following:  | (1x5) |
|   | a) Relative humidity   |       |
|   | b) Thickness of ozone layer  |       |
|   | c) Salinity  |       |
|   | d) Productivity  |       |
|   | e) Ecological efficiency   |       |
| 3 | a) Diagrammatically represent the relative proportions of the various reservoirs of Hydrosphere.                           | (5x6) |
|   | b) List any <b>ten</b> energy requiring vital processes of the living organisms.   |       |
|   | c) With the help of a diagram explain why an area in the rain shadow becomes a desert?                                     |       |
|   | d) Elaborate the features that impart stability to the food web and the ecosystem.   |       |
|   | e) Using the energy flow diagram explain why the number of links in a food chain is limited to 3 or 4.                     |       |
|   | f) Suggest how a scheme of 'zero garbage generation' in a city based on the principle of                                   |       |
|   | Reduce, Reuse and Recycle can be made successful.  |       |
| 4 | Prepare brief accounts of the following:   |       |
|   | a) Natural global warming; & b) El-Niño  | (5+5) |
| 5 | a) Briefly describe the parameters that need to be checked to ensure that water is fit for consumption.                    | (5+5) |
|   | b) Why is ozone considered to be a pollutant in the troposphere and a protectant in the stratosphere?                      | (0.0) |
| 6 | Define the term soil. How would you proceed to know about the nature of the soil of a particular place? Explain in detail. | (2+8) |
| 7 | Discuss how the climatic factors govern the distribution and characteristics of the biomes.                                | (10)  |
| 8 | Growth of human population has an impact on resource availability. Explain taking into account any five resources.         | (10)  |

## TUTOR MARKED ASSIGNMENT MED-002: SUSTAINABLE DEVELOPMENT: ISSUES AND CHALLENGES

Course Code: MED-002 Assignment Code: MED -002/TMA/2009

Marks: 100

**Note:** - The Assignment is based on the entire course.

- All questions are compulsory. Marks for the questions are shown within brackets on the right hand side.

|            | brackets on the right hand side.  - Please answer in your <b>own words</b> , do not copy from the course material.                                   |          |  |  |
|------------|--|----------|--|--|
| Answ       | Answer all questions in each category. Try to write the answer in your own words.  |          |  |  |
| A)         | Answer in about 1000 words each.   |          |  |  |
| 1.         | Describe the fundamental principles of sustainable development. What are the indicators of unsustainable development activities?                     | 20       |  |  |
|            | What do you understand by carrying capacity? Explain how equality of women is related to sustainable development?                                    |          |  |  |
| 2.         | What are the major challenges confronting Sustainable Development. or  | 20       |  |  |
|            | What are the issues and the major challenges confronting sustainable development?  |          |  |  |
| B)         | Answer in about 600 words each.  |          |  |  |
| 3.         | Discuss various parameters of sustainable development.   | 12       |  |  |
|            | or Explain the patterns of industrialisation in the world.   |          |  |  |
| 4.         | Discuss the failures of economic development of developing countries. What are the initiative taken to bridge the North-South divide?                | 12       |  |  |
|            | Describe the few corrective steps to address the ill effects of global warming.  |          |  |  |
| 5.         | Explain the regional initiatives taken for environmental cooperation.  | 12       |  |  |
|            | What are the Translational Corporations? How do they function? Compare TNCs with national company.   | a        |  |  |
| 6.         | Trace the history of global protest movements for sustainable development. Comment on t various dimensions from the perspective of your own country. | ne<br>12 |  |  |
|            | Discuss the role of scientific and traditional knowledge for sustainable development.  |          |  |  |
| <b>C</b> ) | Write a short note on the following in about 300 words each.   |          |  |  |
| 7.         | The use of traditional and indigenous technologies for sustainable development.  | 6        |  |  |
|            | Explain the issues that need to be addressed to overcome the threat to bio-diversity.  |          |  |  |
| 8.         | The role of the Co-operatives in sustainable development.  | 6        |  |  |

How have the people's movements contributed to the betterment of the environment?

### TUTOR MARKED ASSIGNMENT MED-003: ENERGY AND ENVIRONMENT

Course Code: MED-003
Assignment Code: MED-003/TMA/2009

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) a) List all electric power consuming devices in your home along with their power ratings. Calculate the total power consumed in your home on one typical day each in summer, rainy season and winter. (1+9)
  - b) Discuss the impact of thermal power plants and hydro-power plants on the environment. Answer in not more than 500 words. (10 +10)
- 2) List five of your daily activities that involve energy use and describe their environmental impact. Explain how demand-side management can help in reducing energy use in these activities. (5 + 10 + 10)
- Distinguish between the demand side, end-use, energy services approach and the supply-side approach to the energy problem in the Indian context. Give suitable examples from your experience to support your argument. (5+5+5)
  - b) Discuss the measures that can be taken to improve energy use efficiency in various sectors of our economy. (10)
- 4) a) Make a list of ten useful applications of renewable energy technologies suitable for your environment. (10)
  - b) Describe a sustainable action plan for using these technologies in your surroundings in not more than 250 words. (10)

#### TUTOR MARKED ASSIGNMENT

#### **MED-004: Towards Participatory Management**

Course Code: MED-004
Assignment Code: MED-004/TMA/2009

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. Define PRA and describe the commonly used PRA tools. How are these tools helpful in the participatory development projects? (2+4+4)2. a) What is participatory management and how participation of local people can help in management of natural resources of our country? **(5)** Discuss the role of decentralization of power in the management of natural resources by giving examples. **(5)** 3. Explain five major issues that need to be addressed while establishing participation as a key principle in practices/procedures of an organisation. (10)4. Which model of development is suitable for the South Asian countries? Analyse (10)critically. 5. Explain how reversals in learning would help the rural developers in sustainable development of rural areas. (10)6. In what way globalisation has strengthened the strategic actions for participation of women in the area of environment and development? (10)7. Describe the aims, mission and function of SACEP. List the activities of SACEP which you think are going to help all South Asian countries, and explain how. (3+2+5)8. "Young people can participate in activities regarding sustainable development in different ways due to their unique characteristics and concerns." Comment on this statement. (10)9. How can participatory management help people living on the edge of forest? Explain how they can help in the conservation of forest. Give appropriate examples
- 10. a) Why is mountain ecosystem considered fragile in nature?
  - b) List the high priority issues of Hindu-Kush region.

in this context.

c) Discuss how sustainable development of Hindu-Kush region can support the people of all the eight countries of the mountain area. 2+3+5)

(6+4)