

Unit 5

Climate Change

Objectives

After the completion of the unit, you should be able to

- ◆ comprehend and summarise texts.
- ◆ ask and answer questions.
- ◆ write letters to newspaper highlighting certain problems.
- ◆ make dialogue on given topics.

Overview

Lesson 1 : The greed of the roaring rivers.

Lesson 2 : Environment pollution.

Lesson 3 : Man and climate.

Lesson 4 : Putting our fish in hot water!

Lesson 5 : A friend of the Earth.

Answer Key

Lesson 1 : The greed of the roaring rivers

A. Look at the picture and try to answer these questions orally.

1. What can you see in the picture?
2. Have you ever seen river erosion?
If yes, where and when did you see it?



Eroded bank of the River Jamuna

B. Read the story carefully.



The sufferings of Meherjan

Meherjan lives in a slum on the Sirajgonj Town Protection Embankment. She is nearly 45 years old. She lives in a polythene-roofed shelter. In front of her shelter, she is trying to make a fire to cook the days only meal. She is trying to add some fallen leaves and straw to the fire with her weak, trembling hands. The whispering wind from the river Jamuna makes the fire unsteady. The dancing of the flames reminds Meherjan the sufferings of her life.

A few days ago, Meherjan had everything—a family, cultivable land and cattle. The erosion of Jamuna consumed everything including Meher's house, trees, vegetable garden and the bamboo bush. Once she had a happy family. But she has lost

everything. Now she is the only one left to live on with the loss and the pain. The greedy Jamuna has shattered her dreams and happiness.

Bangladesh is a land of rivers. So, thousands of families are waiting for sufferings like Meherjan because of the river erosion of the Padma, the Meghna and other rivers. It is estimated that river erosion makes at least 100000 people homeless every year in Bangladesh. Climate change is the main reason of river erosion. If we cannot take necessary actions to stop climate change, there will be thousands of more Meherjans in our towns and villages every year.



C. Read and note.

embankment	:	বেড়িবাঁধ
shelter	:	আশ্রয়
trembling	:	কেঁপে ওঠা
whisper	:	শো শো শব্দ
unsteady	:	টলমলে/নড়বড়ে
remind	:	মনে করিয়ে দেয়া
consume	:	নিঃশেষ করা বা গ্রাস করা
shatter	:	ভেঙ্গে চুরমার করা
estimate	:	আনুমানিক হিসাব
erosion	:	ভাঙ্গন বা ক্ষয়সাধন



D. Read B again and choose the correct answer.

- Which of the following has the closest meaning of the word 'tremble'?
 - soften
 - strick
 - harden
 - quiver
- What do the expression "Meherjan's trembling hands" mean?
 - She is hard working.
 - She is very weak.
 - She is strong.
 - She is active.

3. What is the condition of 'Meherjan' after river erosion?
 - (a) She became wealthy after river erosion.
 - (b) She was poor before river erosion.
 - (c) She became poor after river erosion.
 - (d) She was unkind after river erosion.

4. What do you mean by 'whispering wind'?
 - (a) wind that blows across the river.
 - (b) wind that blows with a hissing sound.
 - (c) wind that helps someone to make a fire.
 - (d) wind that blows in winter.

5. Which of the following statement is true about 'Meherjan'?
 - (a) She is a victim of river erosion.
 - (b) She has lost everything for her own fault.
 - (c) She is a prey to the anger of nature.
 - (d) She is a victim of rainy season.

6. Now Meherjan is living on
 - (a) embankment
 - (b) street
 - (c) brick built houses
 - (d) tin shedded houses

7. What is the main theme of the passage?
 - (a) natural calamities.
 - (b) erosion by the river Jamuna.
 - (c) natural disaster.
 - (d) erosion by the river Padma.

E. Read B again and answer the questions first orally and then in writing.

- (a) What does Meherjan use to make fire for cooking her meals?
- (b) What property did Meherjan lose for river erosion?
- (c) How does river erosion bring about change in a man's life?
- (d) When does river erosion usually occur?
- (e) What do you know about Meherjan's family?

F. From your reading of the above passage fill in the blanks with suitable words from the given box.

river	victims	slum	member	reason
near	lives	be	erosion	become

Meheraj is a poor woman who lives in a (a)_____. She lost everything by the (b)_____ of the river Jamuna. Now she (c)_____ on the embankments. She is only a (d)_____ alive of her family. Like Meherjan there (e)_____ many people who have (f)_____ the victim of (g)_____ erosion. People living (h)_____ the rivers are the most likely (i)_____ of river erosion. Climate change is the main (j)_____ of river erosion.



G. Write a paragraph on Humans have nothing to do to control river erosion.

Lesson 2 : Environmental pollution

A. Look at pictures below and answer the questions.

1. What do you see in each picture?
2. What are some of the common sources of environmental pollution?
3. Which of these sources are most threatening for your environment?



Picture-1: Brick kilns polluting air



Picture-2 Untreated toxic fluids released from several dyeing factories in Gazipur is polluting rivers and canals, posing environmental and health hazards.



Picture-3: Soil pollution by waste dumping



B. Now read the following passage to know more about environmental pollution in Bangladesh.

Bangladesh is in the grip of all sorts of pollution like air pollution, soil pollution and water pollution. The urban people are the worst sufferers of such pollution. Some kinds of pollution and ways of coping with them are given below.

Air Pollution

Air is polluted in many ways. It is polluted by industrial plants, brick fields, old vehicles and road construction. We can reduce this type of pollution by making less use of motor vehicles and avoiding the use of vehicles older than 20 years. We can use proper lubricants to reduce smoke emission. We can also encourage people to use Compressed Natural Gas (CNG) as fuel. We may relocate brick fields in remote areas. We can aware people about air pollution.

Water pollution

Water can be polluted in many ways. Farmers use chemical fertilizers in their fields to get better crops. These are washed away into the rivers, canals and ponds and get mixed with water and pollute it. Sometimes mills and factories throw their waste products containing poisonous chemicals into rivers and canals and pollute water. We need to be more careful about disposing household and industrial wastes. Therefore we must be aware of using chemicals as they may pollute our rivers, canals and lakes.

Soil pollution

We produce garbage and industrial wastes everyday but not dispose properly. The mismanagement of household wastes, particularly the polythene shopping bags has caused serious threat to the soil, and the drainage system. The use of agricultural pesticides, fertilizers are the cause of soil pollution. Sometimes fuel leakages from automobiles pollute the soil. Pesticides and fertilizers are the cause of soil pollution. Natural fertilizers and compost can be used instead of chemical fertilizers. Recycling is another way to reduce and control soil pollution. Recycling papers, plastics and other materials can reduce soil pollution. Tree plantation can also reduce soil pollution.



C. Read and Note.

reduce	:	lessen
urban	:	town
vehicles	:	transport
poisonous	:	toxic
dispose	:	arrange
pesticides	:	chemical substance used to kill pests.
mismanagement:		manage wrongly



D. From your reading of the above text complete each blank space in the table.

Pollution	Causes	Suggestions
Air pollution	Toxic smokes from (i)----- plants.	We can (ii)----- people about air pollution.
Water pollution	Farmers(iii)----- Chemicals fertilizers in their fields.	They can use (iv)----- fertilizer.
Soil pollution	We dispose (v)----- here and there.	Recycling is another way to reduce(vi)----- pollution.



E. Now write a paragraph on 'Polluting the land means polluting the water'

Lesson 3 : Man and Climate

A. Read and think about the questions.

1. Can man influence the climate? If the answer is yes, explain how?
2. Which human activities are responsible for increasing carbon dioxide in the atmosphere?
3. How can trees help to save our environment?



Now read the text below and find answers to the above questions.

Humans cannot change the sun's radiation. But they can control the increase amount of carbon dioxide. The main cause of the increase of carbon dioxide level in the atmosphere is the burning of fossil fuels. Since the end of the 19th century, industrial activities increased rapidly giving rise to many factories. These factories use coal, natural gas to produce electricity. Nowadays, about 85 million barrels of crude oil are burnt daily. It produces carbon dioxide. Therefore it is clear that more and more greenhouse gases like carbon dioxide are being generated world wide by humans. Moreover, we are also increasing the green-house effect by cutting down trees. We cut down trees everyday to make fire, furniture and other purposes. As a result, carbon dioxide is increasing and oxygen is decreasing day by day.

**B. Read and note.**

increase	:	become greater in number/quantity etc.
decrease	:	reduce
worldwide	:	everywhere in the world.
furniture	:	movable articles
amount	:	total sum or value.
produce	:	emit
moreover	:	besides
purposes	:	intention.

**C. Read the statements below and write if they are true/false. If false, give the correct information.**

1. Fossil fuels are burnt for industrialization.
2. Coal is the only fuel used for generating energy.
3. At present, nearly 85 million barrels of crude oil are used weekly.
4. Carbon dioxide is decreasing day by day.
5. Forests help consume carbon dioxide gases from the air.

D. Match the meaning of words in column A with the words/ phrases in column B.

Column A	Column B
(i) sun's radiation	a. unrefined petroleum that can be refined to produce diesel, gasoline, kerosene etc.
(ii) fossil fuels	b. energy that is transmitted from sun in the form of rays.
(iii) crude oil	c. non-renewable sources of energy that comes from the remains of plants and animals.
(iv) generate	d. the mixture of gases that surrounds the earth.
(v) atmosphere	e. to produce heat, electricity, power etc.

E. Write a letter to the Editor of a newspaper expressing your concern about growing deforestation in your area. Describe how deforestation is changing your environment. Also suggest what actions can be taken to stop cutting down trees. Use the following ideas in your letter :

- ◆ dangers of deforestation.
- ◆ result of increasing carbon dioxide on earth.
- ◆ the greenhouse effect.
- ◆ creating awareness among the people.
- ◆ necessary steps to make the environment healthy.

Lesson 4 : Putting our fish in hot water!

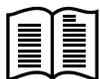
A. Spend one minute thinking about your life as a fish.



Fishing in Bangladesh

B. Do you agree with the following statements on fish and fishing?

- a. Fish will never disappear. There will always be enough fish to feed the world.
- b. In many ways, people are the same as fish.
- c. The hobby of fishing should be banned to help protect fish.



C. Read the text below carefully.

Fish population is in serious danger from global warming. Climate change is increasing the water temperature in rivers, lakes and seas. This means there is less food and oxygen available for fish. It also means the fish may not grow fully. Some fishes will become extinct if temperatures rise even by one or two degrees.

Climate change increases the pressure on fish population. Fishes are one of the world's most valuable assets. Forty percent of people in the world eat fish as their main source of protein. If we fail to reduce greenhouse gas emissions, we will increase the pressures on fish. As a result, people who depend on fish will suffer from hunger and poverty.



D. Read and note.

climate	: regular pattern of weather condition.
temperature	: degrees of heat or cold.
available	: free to be seen.
grow	: increase
pressure	: force
emission	: discharge
poverty	: state of being poor.



E. Read the text C and write the following statements as true or false. If

false, write the correct answer.

1. Global warming is increasing day by day.
2. Climate change decreases the temperature.
3. Fifty percent of people eat fish for protein.
4. Fishes are not valuable assets.
5. Some fishes cannot reproduce in warm water.

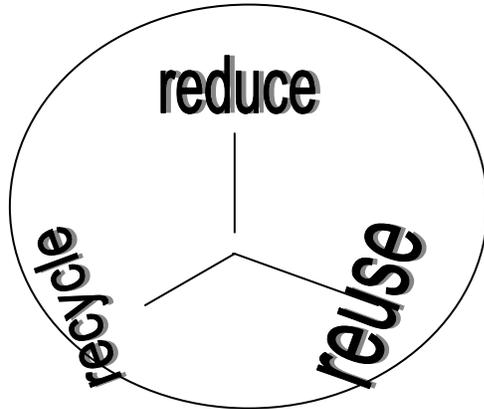


F. Make a dialogue between you and your friend about climate change.

G. You are a nature lover. Write a letter to the organizers of the National Climate Change Conference in Bangladesh. Tell them about how global warming is changing your environment. Also suggest what they can do to help save fish population.

Lesson 5 : A friend of the Earth

A. Read and answer the questions.



1. Do you throw away empty cans and bottles?
2. What do you do with your old newspaper?
3. What happens to the garbage after you throw it away.?



B. Read the following text carefully to know about how we can save our environment.

Lets save our planet!

Everybody can play an important role to protect the environment from being spoilt. Some suggestions are given below.

Re-use

Re-use means using the same item again and perhaps again and again. Re-use has been carried out for centuries. It was done for clothes, toys, cutlery, crockery and other tools handed down from generation to generation. Second-hand shops and antique dealers rely on re-use. In large cities some people, especially those who are poor, make living by sorting and picking through garbage dumps and re-using and selling what they can.

Recycling

Recycling mainly involves processing materials so that they can be used as raw materials for making other things. They may be used to produce the same product for example, broken pieces of glass can be made into new glass or they may be

very different, for example, iron and steel from cans and cars can be re-smelted to make electrical poles and rods.



C. Read and note.

waste	:	আবর্জনা
especially	:	বিশেষভাবে
re-use	:	পুনরায় ব্যবহার
cutlery	:	ছুরি
crocery	:	বাসন-কোসন
dealer	:	ব্যবসায়ী
garbage	:	পরিত্যক্ত অংশ
example	:	দৃষ্টান্ত উদাহরণ
raw material	:	কাঁচামাল



D. Choose the correct answer from the alternatives.

- There are _____ uses of waste.
 - no
 - many
 - few
 - harmful
- Re-use means using the same item-
 - twice
 - again and again
 - thrice
 - once
- In big cities some _____ people make their living by sorting and picking through garbage dumps.
 - well off
 - educated
 - poor
 - rich
- The idea of re-using things is very-----
 - old
 - recent

- (c) modern
- (d) new
- 5. The synonym of the phrase "for example" is -----
 - (a) for instance
 - (b) exampilary
 - (c) for good
 - (d) for ever
- 6. "For centuries" means-----
 - (a) for a decade
 - (b) for hundreds of years
 - (c) for a hundred years
 - (d) for a couple of years
- 7. For earning livelihood many people collect and-----waste materials.
 - (a) clean
 - (b) keep
 - (c) sell
 - (d) use

E. Now answer the following questions.

- a) How can you re-use anything?
- (b) What kind of goods, clothes and toys can be donated?
- (c) How recycling may help save our environment?
- (d) Why does recycling mainly involve processing materials?
- (e) What kind of materials can we recycle?

F. Complete the table below with information from the passage.

What/which	What is it	examples
Reuse	using same thing again and again	clothes, toys crockery etc.
Recycling	-----	-----

 **Answer Key**

Lesson-1

D.

- 1. (d) quiver
- 2. (b) She is very weak.

3. (c) She became poor after river erosion.
4. (b) wind that blows with a hissing sound.
5. (a) She is a victim of river erosion.
6. (a) embankment.
7. (b) erosion by the river Jamuna.

E.

write the answers and show them to your tutor. One is done for you.

- (a) Meherjan uses fallen leaves and straw to make fire for cooking her meals.

F.

- (a) slum
- (b) erosion
- (c) lives
- (d) member
- (e) are
- (f) become
- (g) river
- (h) near
- (i) victims
- (j) reason

Lesson-2

D.

- (i) industrial
- (ii) aware
- (iii) use
- (iv) natural
- (v) garbage
- (vi) soil

Lesson-3

C.

1. True
2. False

CA : Coal, natural gas, electricity, petroleum are used for generating energy.

3. False

CA : At present nearly 85 million barrels of crude oil are used daily

4. False :

CA : Carbon dioxide is increasing day by day.

5. True

D.

(II + b)

(II + c)

(III + a)

(IV + e)

(V + d)

E.

Write the letter and show it to your tutor.

Lesson-4

E.

1. True

2. False

CA : Climate change increases the temperature.

3. False

CA : Forty percent of people eat fish for protein.

4. False

CA : Fishes are valuable assets.

5. True

F.

A dialogue between myself and my friend John about climate change is given below.
(One is done for you).

Myself : Climate change is a great problem for us.

John : Global warming is the main reason for climate change.

Myself :

John :

G.

Write the letter and show it to your tutor.

Lesson-5**D.**

1. (b) many
2. (b) again and again
3. (c) poor
4. (a) old
5. (a) for instance
6. (c) for a hundred years.
7. (c) sell

E.

Write the answers and show them to your tutor.

F.

Recycling	processing old materials to produce new things	broken glass can be made into new glass.
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