

**NATIONAL UNIVERSITY OF LESOTHO**  
**FACULTY OF HUMANITIES**  
**COMMUNICATION AND STUDY SKILLS UNIT**  
**ELG 1315: COMMUNICATION AND ACADEMIC LITERACY FOR SCIENCE AND**  
**TECHNOLOGY**  
**GROUP D3**

**JANUARY 2024**

**MARKS: 100**

**TIME: 3 HOURS**

**INSTRUCTIONS:**

- **ANSWER ALL QUESTIONS**
- **PLEASE NOTE THAT THE PAPER HAS TWO SECTIONS:**
  - A – ESSAY WRITING**
  - B – READING COMPREHENSION**
- **BEGIN EACH QUESTION ON A FRESH PAGE**
- **WRITE YOUR STUDENT NUMBER AND GROUP CLEARLY**
- **WRITE LEGIBLY**

**SECTION A- ESSAY WRITING**

**QUESTION 1**

Pollution is a global problem affecting the large majority of the world, especially cities and towns. It has been said that only a few cities in the world are pollution free. However, not enough has been written on pollution. Therefore, write a **DESCRIPTIVE ESSAY** on pollution focusing on the following topic

*Preventative Measures to curb Pollution*

**Note:**

- Select relevant material from the given passages.
- Include **one direct** and **more than one indirect** quotation in your essay.
- Marks will be awarded for the following:
  - Appropriate content
  - Effective paragraphs
  - Relevant quotations
  - Correct grammar and spellings
  - Academic literacy style

**Passage 1**

**Pollution**

Pollution is the introduction of substances (or energy) that cause adverse changes in the environment and living entities. Pollution need not always be caused by chemical substances such as particulates (like smoke and dust). Forms of energy such as sound, heat or light can also cause pollution. These substances that cause pollution are called pollutants. Pollution, even in minuscule amounts, impacts the ecological balance. Pollutants can make their way up the food chain and eventually find their way inside the human body. Read on to explore the types of pollution and their implications.

There are various types of pollution chiefly arising as a result of anthropogenic causes. These are either caused by natural events (like forest fires) or by man-made activities (like cars, factories, nuclear wastes, etc.) These are classified into the following major types of pollution Air Pollution, Water Pollution, Soil Pollution, and Noise Pollution.

Air pollution refers to the release of harmful contaminants (chemicals, toxic gases, particulates, biological molecules, etc.) into the earth's atmosphere. Some causes that contribute to air pollution are: Burning fossil fuels, Mining operations and Exhaust gases from industries and factories. The effects of air pollution vary based on the kind of pollutant and they include Increased risk of respiratory illness and cardiovascular problems; Increased risk of skin diseases, May increase the risk of cancer; as well as Global warming

Water pollution is said to occur when toxic pollutants and particulate matter are introduced into water bodies such as lakes, rivers and seas. These contaminants are generally introduced by human activities like improper sewage treatment, oil spills, dumping solid wastes in water bodies among others

Soil pollution, also called soil contamination, refers to the degradation of land due to the presence of chemicals or other man-made substances in the soil. Compared to the other types of pollution, the effects of soil pollution are a little more obscured, but their implications are very noticeable.

Noise pollution refers to the excessive amount of noise in the surrounding that disrupts the natural balance. Usually, it is man-made, and in general, any sound which is over 85 decibels is considered to be detrimental. Also, the duration an individual is exposed plays an impact on their health.

*Source:* Pollution, 2023, Longman Publishers, Samantha Violet Davidson, London, second edition

## **Passage 2**

### **Air Pollution**

Air pollution consists of chemicals or particles in the air that can harm the health of humans, animals, and plants. It also damages buildings. Most air pollution is created by people, taking the form of emissions from factories, cars, planes, or aerosol cans. Second-hand cigarette smoke is also considered air pollution.

Some types of air pollution, such as smoke from wildfires or ash from volcanoes, occur naturally. These are called natural sources. Air pollution is most common in large cities where emissions from many different sources are concentrated. Large cities in poor and developing nations tend to have more air pollution than cities in developed nations. According to the World Health Organization (WHO), some of the world's most polluted cities are Karachi, Pakistan; New Delhi, India; Beijing, China; Lima, Peru; and Cairo, Egypt. However, many developed nations also have air pollution problems. Los Angeles, California, is nicknamed Smog City.

People experience a wide range of health effects from being exposed to air pollution. Effects can be broken down into short-term effects and long-term effects. Short-term effects, which are temporary, include illnesses such as pneumonia or bronchitis. They also include discomfort such as irritation to the nose, throat, eyes, or skin.

Long-term effects of air pollution can last for years or for an entire lifetime. They can even lead to a person's death. Long-term health effects from air pollution include heart disease, lung cancer, and respiratory diseases such as emphysema. Air pollution can also cause long-term damage to people's nerves, brain, kidneys, liver, and other organs. Some scientists suspect air pollutants cause birth defects.

Global warming is an environmental phenomenon caused by natural and anthropogenic air pollution. It refers to rising air and ocean temperatures around the world. This temperature rise is

at least partially caused by an increase in the amount of greenhouse gases in the atmosphere. Greenhouse gases trap heat energy in the Earth's atmosphere.

In addition to the international Kyoto Protocol, most developed nations have adopted laws to regulate emissions and reduce air pollution. In the United States, debate is under way about a system called cap and trade to limit emissions. This system would cap, or place a limit on the amount of pollution a company is allowed. Companies that exceeded their cap would have to pay. Companies that polluted less than their cap could trade or sell their remaining pollution allowance to other companies.

In 2006 the World Health Organization issued new Air Quality Guidelines. The WHO's guidelines are tougher than most individual countries' existing guidelines. The WHO guidelines aim to reduce air pollution-related deaths by 15 percent a year. Taking public transportation instead of driving a car, or riding a bike instead of traveling in carbon dioxide-emitting vehicles are a couple of ways to reduce air pollution. Avoiding aerosol cans, recycling yard trimmings instead of burning them, and not smoking cigarettes are others.

*Source:* Journal of Environmental Conservation, issue 3, 2019, volume 16, Air Pollution, pages 40-60

### **Passage 3**

#### **Effects of Pollution on Human Health**

The effects of pollution are felt by every living thing on the planet, both big and small, in a wide variety of different ways. Human health, for example, is directly connected to the quality of the air we breathe and the water we drink – two things necessary for survival that are impacted by pollution every day. Access to clean air is one of the key deciding factors that determines whether or not a country has strong public health. Breathing in polluted air causes damage to our internal organs and is particularly dangerous for vulnerable groups like children, the elderly, or people with chronic health issues.

One of the most prevalent health issues that is caused by exposure to air pollution is cancer. Studies have shown that living near highways and breathing in vehicle pollution increases the risk of developing breast cancer. Exposure to airborne chemicals used in aerosol products and paint remover has been shown to increase rates of breast cancer as well. Lung cancer rates in

industrialized areas also show the effect of pollution on human health. The mining and burning of coal creates heavily polluted air, increasing rates of lung cancer in communities where coal is mined and used to generate energy.

Cardiovascular disease is another health issue that can stem from breathing polluted air. Daily exposure to nitrogen oxides (chemical compounds found in car exhaust and smog) has been shown to increase a person's stroke risk. These same chemicals can also decrease the amount of good cholesterol that we have inside our bodies, increasing our odds of developing other cardiovascular diseases. These cardiovascular issues can be especially dangerous for people who are pregnant. When exposed to traffic related air pollution, extreme changes in blood pressure can occur that can seriously jeopardize the health of both the baby and the parent.

Many respiratory issues, like asthma, have a direct link to air pollution. When air is heavily polluted, asthma symptoms can be triggered or made worse. Children can even develop asthma from breathing polluted air. Why this happens is not entirely understood, but there's evidence that suggests childhood exposure to high levels of carbon monoxide and other air pollutants can alter a child's DNA. These alterations make the child more susceptible to developing asthma. In addition to asthma, respiratory health issues like COPD, emphysema, and chronic bronchitis can all be caused by air pollution.

UN Environment Assembly concludes with 14 resolutions to curb pollution, protect and restore nature worldwide

Nairobi, 02 March 2022 – The 5th UN Environment Assembly concluded today in Nairobi with 14 resolutions to strengthen actions for nature to achieve the Sustainable Development Goals. The world's ministers for the environment agreed to establish an Intergovernmental Negotiating Committee with the mandate to forge an international legally binding agreement to end plastic pollution. "Plastic pollution has grown into an epidemic. With today's resolution, we are officially on track for a cure." Amina J. Mohammed, added: "Today, no area on the planet is left untouched by plastic pollution, from deep-sea sediment to Mount Everest. The planet deserves a multilateral solution -that speaks from source to sea. A legally binding global agreement on plastic pollution will be a truly welcome first step."

A second key resolution is Drive your car less. Vehicle exhaust is a major source of air pollution in Minnesota: carpool, bike, bus, telecommute, electric vehicles. How could you burn less fuel? Keep your car in good repair. Buses and big trucks produce particularly unhealthy exhaust.

Burning your household garbage is dangerous to your health and our environment, and generally against the law in Minnesota. Limit backyards fire in the city. Smoke from backyard fires can cause unhealthy conditions for hundreds of people, especially during stagnant weather conditions.

Also plant and care for trees. Trees filter pollutants and absorb carbon dioxide. Trees also release oxygen into the atmosphere and help cool our homes.

*Source:* Kevin McDonald, 2023, Effects of Pollution on Human Health, <https://www.weforum.org/agenda/2022/02/accelerate-and-strengthen-the-global.html/> (accessed on 5th January 2024)

## **SECTION B- COMPREHENSION WRITING**

## QUESTION 2

Read the following passage and answer the questions that follow.

### MASERU 2050 URBAN PLAN

The Lesotho Urban Agenda aims to elevate the **standing** of urbanization within the Lesotho Strategic Development Plan and to foster a sustainable and competitive urban development system that will contribute to Lesotho's economic, social and environmentally sustainable development.

This was revealed during presentations on Lesotho's urban agenda at the Eighteenth Private Consultative Meeting. The meeting was held virtually on the Zoom online platform. When officially opening the meeting, the Minister of Trade and Industry, Dr Thabiso Molapo remarked that in the **post-COVID-19 era**, Lesotho and the world are starting to emerge from two years that changed the world in of virtually different ways.

“It is during COVID-19 that countries learned about healthy cities which need to be healthy and must be designed to function differently and be resilient,” he said.

Dr Molapo noted that the 21st century will be the century of cities, saying by 2050, at least 70 percent of the world population will live in the cities. Even though Lesotho will not be by that rate, there will be a raising in urbanisation and settlement patterns occurring.

However, he said the good news is that properly planned cities can help the country to face and confront the challenges within, saying instead of looking at cities with pessimism the country should look at urbanisation with optimism because if they are well planned, organised and well managed can deliver urban dividends, thus a bonus that comes from economic development, poverty **eradication**, social cohesion and environmental sustainability. He stressed that when the country's cities are properly planned, they can deliver on Sustainable Development Goals (SDGs) and can specialise in national economic development strategy.

The 2050 goal for the Maseru city plan started in 2017 with the aim of **revamping** Maseru in line with promoting SDGs which show that there will be a green system that turns to benefit Basotho as there will be improved management of natural resources through rehabilitation of wetland, river trail and restoration of deteriorating landscapes.

Moreover, the urban plan shows that by 2050 the government aims at having environmental rehabilitation, protection and resilience that will promote clean-up of waste dumps and tree planting programs for conservation and food production.

The presentations on Lesotho's Urban Agenda included Dr Donna D. Rubinoff, the Maseru City Council (MCC) Director of Planning, Mrs. Ntsoaki Matabo and Mr. PG Smit who is a Consultant.

The Public-Private Dialogues are organised by the Prime Minister's Delivery Unit (PMDU) to facilitate regular **dialogue** between the government and the private sector. The participants in these meetings include the Prime Minister, Ministers, Principal Secretaries, Heads of State-Owned Entities, Representatives of Development Partners and Private sector.

By Staff Reporter: Noliwe Velaphe

## QUESTIONS

- a) What is the objective of the Lesotho Urban Agenda? (4)
- b) How will a competitive urban development system benefit Lesotho? (2)
- c) Which word in in paragraph 2 has the same meaning (synonym) as virtually. (2)
- d) How did Covid-19 benefit the world? (3)
- e) Will Lesotho's population be living in the cities by 2050? Support your answer. (4)
- f) What will be happening in Lesotho in 2050 in terms of city life? (3)
- g) Find the antonym of optimism in the passage (2)
- h) What are the results of a properly planned cities? (4)
- i) Write a summary of the passage above. (10)
- j) Give a synonym or a phrase (not more than eight words) of the bolded words in the passage:
  - i. standing
  - ii. post
  - iii. era
  - iv. eradication
  - v. revamping
  - vi. dialogue (6)