

## Unit 2. URBANIZATION

### PART 3: READING

#### I. Choose the word or phrase from the box that best fits the blank space in the following passage.

especially      relies      which      infrastructure      transform      environmentally

#### CITIES GOING GREEN

As more and more people concentrate in cities, planners are looking for ways to (1) ..... cities into better living spaces. This can be done by improving existing (2) ..... while also creating more public spaces that are both beautiful and green. This can be hard to accomplish, (3) ..... in cities with a haphazard fashion.

Some cities have been created with the idea of a green city as the goal. One such city, Masdar City in the United Arab Emirates, aims to become a model for other cities to follow. It is being known as a truly green city that (4) ..... strictly on renewable sources such as solar energy to provide all of its energy needs. In addition, it will be a zero waste city in (5) ..... everything that is used can be recycled. Whether it will truly accomplish its goal remains to be seen, but it will also act as an experiment for (6) .....-friendly areas to be tested.

#### II. Choose the word or phrase among A, B, C or D that best fits the blank space in the following passage.

#### SUSTAINABLE CITIES: A CLEANER FUTURE

For the past few decades, there has been an urbanization trend around the world, where more and more people are moving to cities. Since 2009, the UN Habitat (1) ..... that over 3 million people are moving into cities every week. Urban areas have been an attractive destination for migrants in (2) ..... of finding a better job and a higher (3) ..... living.

While migrants contribute (4) ..... to the economies of cities, ever-increasing populations raise issues of congestion, (5) ..... of resources, and increased (6) ..... on waste management infrastructure, healthcare, and education. By 2050, it is estimated that 70% of the world's population will live in cities which makes the concept of Sustainable Cities an efficient (7) ..... the growing population.

(8) ...., Sustainable Cities have an essential role in the urbanization trend to improve residents lives by (9) ..... environmental initiatives and projects such as limiting CO<sub>2</sub> gas emissions in the air, using renewable energy sources, or bringing awareness to environmental issues. With outdoor pollution killing over 3 million lives yearly, (10) ..... in cities, it is evident that urbanization can increase the environmental (11) ..... upon cities. Many cities around the world have redesigned their city planning strategies and commenced initiatives (12) ..... these issues directly.

1. A. estimates	B. expects	C. claims	D. counts
2. A. anticipation	B. hopes	C. view	D. possession
3. A. reason for	B. tax of	C. standard of	D. cost of
4. A. virtually	B. practically	C. immensely	D. annually

5. A. distribution	B. collection	C. reputation	D. solution
6. A. garbage	B. pressure	C. demand	D. dependence
7. A. reaction to	B. resolution to	C. answer to	D. approach to
8. A. Therefore	B. Moreover	C. As regards	D. However
9. A. focusing on	B. depending on	C. developing on	D. putting on
10. A. the most	B. almost	C. equally	D. mostly
11. A. affect	B. cause	C. effect	D. drawback
12. A. to accept	B. to assault	C. to improve	D. to target

**III. Choose the word or phrase among A, B, C or D that best fits the blank space in the following passage.**

<i>burdens</i>	<i>than</i>	<i>proportion</i>	<i>for</i>	<i>enjoy</i>
<i>grounds</i>	<i>stagnant</i>	<i>likely</i>	<i>with</i>	<i>prospects</i>

**AN UNCERTAIN URBAN FUTURE**

Most publications discussing urban change predict that the world will continue to urbanise far into the future. Such projections should be viewed (1) ..... caution. A steady increase in urbanisation among low income nations is (2) ..... to occur only if they also have steadily growing economies. While we should hope that lower income nations achieve more buoyant economies, the current

(3) ..... for most of them are hardly encouraging, with political instability, civil war, and large debt (4) .....

There are also (5) ..... for doubting whether a large (6) ..... of the world's population will ever live in very large cities. In (7) ..... economies, urbanisation levels do not increase much. In successful economies much new investment is going to small or medium sized cities. In regions with advanced transport and communications systems, rural inhabitants and enterprises can (8) ..... standards of infrastructure and services and access to information that historically have been available only in urban areas. Thus, both low and high income nations may have smaller (9) ..... expected increases in the populations of their cities, although (10) ..... very different reasons.

**IV. Read the passage, and choose the correct answer A, B, C or D for each question.**

**LIVING ROOFTOPS**

Creative urban planners continually seek new ways to make cities more satisfying places to live. One versatile tool in this pursuit is the "green roof" which draw from fundamental precepts in architectural design, horticulture, and urban development. At its most basis, a green roof system transforms a conventional roof into a living roof by adding a waterproof membrane. The membrane is then covered with drainage and filter layers, a growth medium (e.g. soil) and live plant. A green roof can be built on a flat or graded surface, can be thick or

thin, and can feature flowering plants. Familiar rooftop garden have plants in pots or planters. A green roof goes further. It is an integral part of a building and one that offers ecological and economic benefits, as well as aesthetic appeal.

Roofs covered in living plants were used in ancient Mesopotamia for aesthetic purposes (the famed Hanging Garden of Babilon), in Viking settlements, and on the American Great Plains for basic shelter and insulation (sod houses). The green roof as we know it, however, is a relatively recent creation. The first modern green roof was developed in Germany during the late 1960s and early 1970s. Their main function was to slow water drainage that was straining storm-sewer systems in urban areas where natural vegetation was scarce. The idea subsequently spread through Europe and made a few inroads into some American cities.

A wide range of environment benefits can result from the adoption of green roof. Preliminary research suggests that living roofs help clean polluted urban air. For example, grass acts as a natural air filter, removing each day 0.2 kilograms of airborne particulates from the air per square meter of grass-covered surface. By converting carbon dioxide (CO<sub>2</sub>) into oxygen through photosynthesis, plants also help limit the build-up of year to meet the annual oxygen requirement of an average human being.

Rooftop green space in cities also helps mitigate what scientists call the urban heat island effect. Structure surfaced with conventional building material-paved roads and black rooftops, for example- absorb solar radiation and release it into the near surface environment in the form of heat. The effect is to raise the air temperature in a big city by up to 5°C over the temperature in the surrounding countryside. Using mathematical models, a Canadian research team found that if only 5 percent of the roof area of Toronto had green roofs, air temperature would be reduced by 1°C to 2°C Celsius.

Green roofs save money through energy and resource conservation. Studies done in Germany, where an estimated 10 percent of all roofs today are green, suggest that green roofs last two or three times longer than conventional roofs. The long service life of a green roof means that fewer resources and less energy will be expended in roof replacement.

Green roofs also save money by lowering the cost of interior heating and cooling. One study found that an average building with a green roof requires 25 percent less cooling in commercial facility in Germany with a green roof save enough money in three years through lower heating and cooling costs, since additional cooling tower had become unnecessary. As energy costs increase, the tenants of buildings with green roofs will undoubtedly reap additional savings.

A city's livability is as much about the attractiveness of one's surroundings as it is about living costs. The aesthetic benefits of green roofs should not be discounted. Green roofs designed to be parks or gardens can help address a lack of green space in many urban areas. Some are even used for the small-scale, largely recreational production of edible vegetables. All this vegetation naturally attracts songbirds, ducks and other waterfowl, butterflies, and bats. Especially for those whose windows look out over a city's roofs cape-apartment dwellers, office workers, even patients in high-rise hospitals a green roof can provide a priceless connection with nature and the cycle of seasons. On the whole, living roofs add plants into urban landscapes, making cities more environmentally sound and less stressful, and they do so in a cost-effective manner.

1. According to paragraph 1, green roofs.

