UNIT 3: CITIES OF THE FUTURE

Mark the letter A, B, C, or D to indicate the word whose underlined part differs from the other three in pronunciation in each of the following questions.

Question 1: A. <u>u</u>nhappy   B. p<u>u</u>blic   C. <u>u</u>rban   D. r<u>u</u>bbish

Question 2: A. <u>s</u>ensor   B. infra<u>s</u>tructure   C. de<u>s</u>igner   D. focu<u>s</u>

Mark the letter A, B, C, or D to indicate the word that differs from the other three in the position of primary stress in each of the following questions.

Question 3: A. private   B. transport   C. urban   D. improve

Question 4: A. operate   B. liveable   C. interact   D. skyscraper

Mark the letter A, B, C or D to indicate the sentence that best completes each of the following exchanges.

5. I _____ of pedaling my bicycle around the city to enjoy the fresh air and improve my health.

A. think   B. am thinking   C. thought   D. was thought

6. People in smart cities fear the loss of _____ as cameras are installed everywhere.

A. private   B. privacy   C. privately   D. privatize

7. Cities need to cope_____ the challenges of growing populations and limited resources.

A. in   B. with   C. for   D. through

8. The installation of _____is an innovative way to increase green areas and biodiversity in urban centres.

A. farming   B. skyscrapers   C. emissions   D. rooftop gardens

9. Building a _____ city involves considering environmental, social, and economic factors to create a harmonious environment.

A. sustain   B. sustainability   C. sustainable   D. sustainably

10. Cities in poorer countries often lack basic _____. Without it, they are unable to function properly as cities.

A. structure   B. construction   C. infrastructure   D. condition

11. Local authorities should find ways to limit the use of private cars and encourage city _____ to use public transport.

A. commuters   B. planners   C. dwellers   D. people

12. Many people believe that a liveable city should provide a _____ of community among its residents.

A. sense   B. feeling   C. state   D. lot

13. It _____ late. I really have to go now. Thank you for a lovely time. Goodbye!

A. goes   B. is getting   C. seemed   D. was becoming

14. Vancouver is often considered to be one of the most_____ cities in the world.

A. fit   B. liveable   C. endurable   D. suitable

15. There's a lot of noise coming from outside. Probably my neighbours _____ a big party.

A. are having   B. have   C. have had   D. had

16. Underground trains _____ the most popular means of transport in big cities over the past few decades.

A. have become   B. are   C. are getting   D. will be

17. The little boy looks _____ because he gets good grades in the exam.

A. happy   B. unhappy   C. happily   D. unhappily

18. I'm sorry I said it. I _____ so bad about it. Please forgive me.

A. appear   B. feel   C. look   D. see

19. I _____ visiting the place, but I can't tell you when I did that.

A. believe   B. understand   C. appear   D. remember

Read the following advertisement and mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks from 20 to 25.

Building a plan for the future

While they face significant economic, social and (20) _____ challenges, city residents also enjoy world leading opportunities for culture, employment and sustainable living. To build a prosperous country, we must unlock cities' potential and give urban leaders the power to build a plan (21) _____ the future. (22) _____ Local Government Association, discuss how two cities are embodying what a city of the future could look like.

Question 20. A. environmental   B. environment   C. environmentally   D. environmentalist

Question 21. A. at   B. on   C. with   D. for

Question 22. A. a   B. no article   C. the   D. an

Buildings in cities of the future aren't just buildings

Nowadays, 50% of the total human population lives in cities. Studies (23) _____ that 35 years from now, that percentage (24) _____ to 75%. That means we need to find a home for 3 billion people in just 35 years.

And, if we want future cities to be smart cities, only some buildings are good enough. We need our skyline to be

made up of buildings that are, amongst other things:

Sustainable: The buildings where we work and live create almost 50% of CO_2 emissions on the planet. Smart buildings (25) _____ with sustainability in mind. This means low-energy houses, natural materials (like cork, clay, or recycled paper), renewable energy use, or waste reduction…

Question 23. **A.** predict   **B.** calculate   **C.** create   **D.** safe instructions
Question 24. **A.** will   **B.** had   **C.** should   **D.** were
Question 25. **A.** designing   **B.** are designed   **C.** designs   **D.** have designed

Mark the letter A, B, C, or D on your answer sheet to indicate the correct arrangement of the sentences to make a meaningful paragraph/letter in each of the following questions.

Question 26.

a. HaNoi is the second most populous city and the second highest population density in VietNam. Therefore, I'm fearful that my city will no longer have space to live and produce.

b. Dear Maria,
I read the newspapers about our Earth in the next 50 years last night and I'm concerned about my city, Ha Noi, in the future.

c. I am worried that Ha Noi will not handle all these challenges and the citizens will find it difficult to survive in the future.

d. Moreover, overpopulation will lead to pollution problems. In fact, Ha Noi is facing air pollution due to the emissions of too many vehicles. I'm worried that this will get worse in the future and people will not have clean air.

e. Furthermore, I fear that the population growth will also lead to a higher unemployment rate because there is only a certain amount of work but the number of people is increasing.

f. Best,
Rosie

  A. b — d — e — a — c — f   **B.** b — c — a — e — d — f
  C. b — e — d — a — c — f   **D.** b — a — d — e — c — f

Question 27.

a. Secondly, living in urban areas enables the residents to have good jobs with higher salaries. As a result, they seem to have enough money to support their families as well as travel and enjoy themselves.

b. Finally, city lives make one more active and confident. City dwellers need to be very active in order to keep up with the fast pace of the city.

c. It is true that there are a lot of people who move to big cities to live in recent years. This tendency can bring about a lot of advantages.

d. In short, living in urban areas benefits people a lot and it is advisable that each person should live in the city to better his life.

e. Firstly, a big city has many kinds of entertainment such as cinemas, shopping mall, museums, parks. Therefore, those who live in urban areas are able to reduce their stress after a hard working day by watching a film or going round at the park.

  A. e — a — c — b — d   **B.** c — e — a — b — d   **C.** c — a — b — d — e   **D.** e — c — a — b — d

Mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks from 28 to 33.

THE CAR OF THE FUTURE

   Driving along the motorway in busy traffic, the driver suddenly presses a button on (28) _____. The car is now driving itself. (29) _____, but driverless cars are already in reality on California's roads. Many cars can already park themselves on the roadside, brake automatically (30) _____, and warn the driver if they are slipping out of the right lane, so going driverless is just the next step towards automated driving.

   Driverless cars are equipped with fast broadband, (31) _____, and even (32) _____ as they approach junctions. Being stuck in traffic jams could become a thing of the past, as driverless cars will be able to drive at speed much closer to each other.

   More than fifty million people die or are injured in road accidents every year, and (33) _____ is caused by human error. Google's driverless car sticks of to the speed limit and doesn't get tired. So wouldn't it be a great idea if all cars were driverless.

Question 28.
  A. our steering wheel   **B.** their steering wheel   **C.** this steering wheel   **D.** his steering wheel
Question 29.
  A. Which may sound like something from the future   **B.** It may sound like something from the future
  C. This may sound like something from the future   **D.** Sound like something from the future
Question 30.

A. having needed to slow down   **B.** need to slow down
C. to need to slow down   **D.** when the car needs to slow down

Question 31.
    A. allowing to overtake them other cars safely   **B.** allowing them to overtake other cars safely
    C. to allow them to overtake other cars safely   **D.** to allow to overtake them other cars safely

Question 32.
    A. to communicate with traffic lights   **B.** traffic lights are communicated with
    C. we are communicated with traffic lights   **D.** communicate with traffic lights

Question 33.
    A. the majority of these accidents   **B.** of these accidents the majority
    C. the accidents of these majority   **D.** these accidents of the majority

Read the following passage and mark the letter A, B, C, or D to indicate the correct word or phrase that best fits each of the numbered blanks.

CITIES GOING GREEN

As more and more people concentrate in cities, planners are looking for ways to transform cities into better living spaces, (34) _____ can be done by improving existing infrastructure while also creating more public (35) _____ that are both beautiful and green. This can be hard to (36) _____, especially 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 (37) _____ cities to follow. It is being known as a truly green city that relies 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 which everything that is used can be recycled. Whether it will truly accomplish its goal remains to be seen, but it will also act (38) _____ an experiment for environmentally friendly areas to be tested.

Question 34: A. which   B. why   C. when   D. that
Question 35: A. rooms   B. spaces   C. places   D. breaks
Question 36: A. develop   B. accomplish   C. deal with   D. create
Question 37: A. the others   B. others   C. another   D. other
Question 38: A. either   B. nor   C. so   D. as

Read the following passage and mark the letter A, B, C, or D to indicate the correct answer to each of the questions.

    Several cities are dealing with the crisis of overpopulation, causing a **dearth** of resources. Social and economical imbalance among citizens creates problems in a community. As technology grows, the concept of Artificial Intelligence and Internet of Things can be used into planning Smart cities which can gradually tackle several issues in a coexistent society.

    The building of a smart city requires large investments by the government. Nonetheless, it is one of the best changes possible in lifestyles if done with conscious implementation. Smart cities are designed for optimum usage of space and resources along with an efficient and optimum distribution of benefits. **It** also aims at increasing connectivity at various levels among citizens, as well as between the administration and population. Public properties such as schools, roads, and hospitals are improved. The system can tackle several redundancies of the present system and save time and money. As technology is rapidly advancing, one can acknowledge that one needs to develop their lifestyles accordingly to adapt to present-day demands.

    Smart cities are meant to be environment-friendly. There are devices which can keep track of air purity level, as well as other environmental and health-related factors. The investment in such a city should also include the maintenance of a conscious work-force which shall review and amend the system. Therefore, a smart city shall only reach a wholesome stage if it stands up to the social and psychological needs of the population.

Source: https://bwsmartcities.businessworld.in/article/Why-We-Need-Smart-Cities/19-02-2019-167307/

Question 39: Which of the following can be the best title for the passage?
    A. The Crisis of Overpopulation
    B. The Concept and Benefits of Smart cities
    C. Artificial Intelligence and Human Needs
    D. Planning and Building Smart Cities

Question 40: The word "**dearth**" in paragraph 2 is closest in meaning to _____.
    A. scarcity   B. surplus   C. balance   D. abundance

Question 41: According to paragraph 2, what is the purpose of a smart city?
    A. To separate administration and population
    B. To replace current cities completely

      C. To maximise the usage of space and resources and enhance connectivity among citizens

      D. To increase government control over citizens

Question 42: The word "**it**" in paragraph 2 refers to _____.

      A. the building of a smart city   B. the government

      C. conscious implementation   D. the usage of spaces and resources

Question 43. According to paragraph 3, which of the following is TRUE about smart cities?

      A. Smart cities are solely about environmental protection.

      B. All smart cities have achieved a wholesome stage.

      C. A smart city should only focus on the social needs of the population.

      D. Devices in smart cities can monitor environmental and health-related factors.

Read the following passage and mark the letter A, B, C, or D to indicate the correct answer to each of the questions.

      As we move closer to the futuristic cities, the demand for smart technology development and IT problem-solving continues to grow. Although the number of developers and innovators tackling Smart City innovations is increasing, there still remains a series of problems all developers face at some point or another in their solutions.

      Smart cities utilise sensor technology to gather and analyse information in an effort to improve the quality of life for residents. Sensors collect data on everything from rush hour stats to crime rates to overall air quality. Complicated and costly infrastructure is involved in installing and maintaining these sensors. Besides, major metropolitan areas are already challenged with replacing decades-old infrastructure, such as underground wiring, steam pipes, and transportation tunnels, as well as installing high-speed internet. Broadband wireless service is increasing, but there are still areas in major cities where access is limited. Funding for new infrastructure projects is limited and approval processes can take years. Installing new sensors and other improvements cause temporary-though still frustrating-problems for people living in these cities. Developers can help make it easier to install and utilise smart technology by considering these challenges at the very early stages of development. By beginning with the end in mind, developers and tech companies can speed up the process of making our cities smarter by implementing easy-to-install hardware.

      In any major city, there's a balance between quality of life and invasion of privacy. While everyone wants to enjoy a more convenient, peaceful, and healthy environment, nobody wants to feel like they are constantly being monitored by "Big Brother." Cameras installed on every street corner may help deter crime, but they can also install fear and paranoia in law-abiding citizens. Another valid concern is the amount of data being collected from all the smart sensors residents come into contact with each day. Developers can help **alleviate** some of the anxieties of smart city residents by adding transparency and education to **their** solutions. By developing with the community in mind and considering how they might respond to new technology, companies can gain trust from the people whose solutions are intended to help. Of course, local government officials and community boards need to be involved in the rollout and educational aspects as well.

      For a Smart city to truly exist and **thrive,** it needs "smart" citizens who are engaged and actively taking advantage of new technologies, with any new city-wide tech project, part of the implementation process must involve educating the community on its benefits. This can be done through a series of in-person town hall-style meetings and email campaigns with voter registration, as well as an online education platform that keeps citizens engaged and up-to-date.

      When technology, city governance, and communities of people come together to improve the quality of life for everyone involved, that's when a city truly becomes "smart."

Adapted from <u>*https://ubidots.com/blog/the-key-challenges-for-smart-cities/*</u>

Question 44: Which of the following can be the best title for the passage?

      A. The Role of Technology in Future Cities

      B. The Evolution of Smart cities: Challenges and Solutions

      C. The Role of Developers in Building Cities

      D. The Influence of Internet Access on City Development

Question 45: According to paragraph 2, what challenges do major metropolitan areas face?

A. The replacement of outdated infrastructure and limited access to broadband wireless service in some areas

B. Limited funding for healthcare and educational facilities

C. The difficulty in educating residents about smart technology

D. Finding developers and tech companies to work on smart city projects.

Question 46: The word "**alleviate**" in paragraph 3 mostly means _____.

      A. worsen   B. expand   C. indicate   D. lessen

Question 47: According to paragraph 3, what could be a concern for residents in a smart city?

A. The overuse of smart sensors in public spaces   B. The constant feeling of being monitored by cameras

C. The lack of involvement from local government officials

D. The residents' lack of knowledge about technology

Question 48: What does the phrase **"their"** in paragraph 3 refer to?

    A. sensors'   B. residents'   C. developers'   D. anxieties'

Question 49: The word **"thrive"** in paragraph 4 is closest in meaning to _____.

    A. struggle   B. suffer   C. prosper   D. maintain

Question 50: Which of the following can be inferred about the role of developers in creating smart cities?

A. Developers should focus on creating smart technologies and not worry about the public reaction.

B. Developers should consider infrastructure challenges and the balance between quality of life and privacy.

C. Developers are responsible for replacing old infrastructure in cities.

D. Developers need to focus on improving broadband wireless service in cities.

B. SPEAKING

Talk about the advantages of roof gardens. You may use the suggested ideas in the box to help you. You can start your talk with the sentence below.

> **Advantages of roof gardens:**
> - Improving air quality
> - Creating habitats for wildlife
> - Interacting and connecting with nature.

    "Roof gardens have several advantages. …."

Firstly, roof gardens help improve the air quality of urban areas by reducing the amount of carbon dioxide and other pollutants in the air. This contributes to a healthier and more oxygen-rich atmosphere, benefiting both humans and other living organisms. Secondly, they can provide a habitat for wildlife. Roof gardens typically feature a mix of plant species, including trees, grasses, flowers, and vegetable gardens. This provides different habitats and food sources for birds, bees, insects, and other wildlife. This can promote biodiversity in urban areas. Finally, roof gardens can help city dwellers interact and connect with nature, offering a peaceful and green space to the urban environment. They offer an environment for relaxation, recreation and physical activities such as reading, doing yoga, walking, jogging, or gardening. Time spent in green spaces can reduce stress and anxiety, boost feelings of happiness and promote mental well-being.

C. LISTENING

Task 1: Listen to city planners talking about a new form of public transportation and circle TRUE or FALSE

1. John doesn't like new flying buses because they are expensive. A. TRUE   B. FALSE

2. According to Michael, lots of people have said that they don't use old buses because they just move too fast.

A. TRUE   B. FALSE

3. Susan thinks new flying buses are definitely faster and safer than old buses. A. TRUE   B. FALSE

4. Lots of commuters will want to fly every day despite the high cost. A. TRUE   B. FALSE

Task 2: Listen and choose the best answer

1. What are John, Michael and Susan discussing about?

A. flying buses   B. traffic jams   C. traffic congestions   D. commuters

2. _____ doesn't like flying busses because he thinks they are expensive.

A. Susan   B. John   C. Michael   D. John and Michael

3. _____ have said that old busses just move too slowly.

A. Lots of people   B. Susan   C. commuters   D. Michael

4. What is John still worried about?

A. the safety   B. the cost   C. the city   D. the congestion

Tapescript:

Susan: Good morning, John, Michael. So, let's discuss these new flying buses. Should we use them in our city? **John,** what do you think?

John: Well, Susan, I don't like them. First of all, they'll probably cost a lot of money.

Susan: OK John. Anything else?

John: Yeah. Our city already has buses, but people don't use them! They probably won't use the flying buses, either.

Susan: I see. Maybe you're right. Michael, what do you think?

Michael: I don't agree with John. Lots of people have said that they don't use our buses because of traffic congestion. They just move too slowly. Flying buses can avoid traffic jams downtown, so they travel much faster.

Susan: Yes, that's right Michael. They're definitely faster than our old buses, and they're much safer, too.

John: I see. That sounds good, but I'm still worried about the cost.

Susan: Michael, you look like you want to say something.

Michael: Yes, Susan. Actually, it's about the cost. If the fare isn't too expensive, I think lots of commuters will want to fly every day. I think our city will collect a lot of money from this.

Susan: That's right. I think they could possibly encourage more people to visit our city, too. If we increase tourism, it'll benefit everyone. So, John, do you agree?

John: Hmm. Yes, I see your point. OK, then.

Susan: Fantastic, that's it, so we all agree.

D. WRITING

I. WORD FORM: Write the correct form of the given words

1. She dealt with the issue quickly and ***efficiently***. (EFFICIENT)
2. The number of thefts of motor ***vehicles*** rose by a third last year. (VEHICLE)
3. Protecting forests is essential to help make sure our planet's ***sustainable*** development. (SUSTAIN)
4. Young people today are used to ***interacting*** with content on the web. (INTERACT)
5. She has a small office that is used for ***private*** discussions. (PRIVACY)

II. Complete the sentences using the verbs in brackets and the adjectives in the box. You can add more words if necessary.

effective	upset	delicious	exciting
surprised	bad	high	active

1. This is one of the best restaurants in town. All the food there (taste) _____.
→ *This is one of the best restaurants in town. All the food there tastes (very) delicious.*
2. The local authority has decided to build a bigger community centre. The idea (seem) _____.
→ *The local authority has decided to build a bigger community centre. The idea seems exciting.*
3. My parents didn't expect me to win the first prize. I did win, but they didn't (appear) _____.
→ *My parents didn't expect me to win the first prize. I did win, but they didn't appear (at all) surprised.*
4. Local people often complain about the new waste collection point in the area. It (smell) _____.
→ *Local people often complain about the new waste collection point in the area. It smells (very) bad.*
5. Some people don't earn much money. The cost of living (seem) _____.
→ *Some people don't earn much money. The cost of living seems (very) high (for them).*
6. Mrs Hoa is involved in many activities in the neighborhood. She (be) _____.
→ *Mrs Hoa is involved in many activities in the neighborhood. She is (very) active.*
7. Most city dwellers travel on crowded buses and trains during rush hour. They often (become) _____.
→ *Most city dwellers travel on crowded buses and trains during rush hour. They often become upset about the delays/traffic jams and crowded trains.*
8. In this city, private cars are banned from the city centre during rush hour. This (seem) _____.
→ *In this city, private cars are banned from the city centre during rush hour. This seems effective in preventing traffic jams.*

III. Choose the appropriate verb form to complete the sentences.

1. Smart cities ***are becoming*** / ***become*** more efficient and connected.
2. Smart cities ***look*** / ***are looking*** modern with smart infrastructure and digital technologies everywhere.
3. The urban lifestyle ***is seeming*** / ***seems*** fast-paced and dynamic with endless opportunities for work, entertainment, and cultural experiences.
4. The urban lifestyle ***is sounding*** / ***sounds*** busy with traffic and people talking all around.
5. He ***is thinking*** / ***thinks*** of buying a new apartment in this modern city. I ***think*** / ***am thinking*** it is a great idea.
6. My mom ***is having*** / ***has*** a good time visiting some famous tourist attractions in Ha Noi.
7. I am on the 87th floor of this building. I ***am feeling*** / ***feel*** nauseous and dizzy right now because I am scared of heights.
8. Ha Noi ***became*** / ***was becoming*** "the city for Peace" in 1999. I am living here now.

IV. Write an article (120-150 words) about the advantages and disadvantages of roof gardens in the city. Use the ideas below to help you.

Advantages	Disadvantages
- improving air quality	- being expensive
- creating habitats for wildlife	- increasing weight on the structure
- interacting and connecting with nature	- being difficult to repair and maintain

Sample answer

These days, roof gardens have become more and more popular in urban areas. In my opinion, this trend could bring both advantages and disadvantages.

On the one hand, roof gardens play important roles in improving air quality in cities by reducing the amount of carbon dioxide and releasing oxygen back into the air. Furthermore, they can bring a habitat for wildlife. For example, they

provide water, food, and cover for birds, bees and insects. They also help city dwellers interact and connect with nature by offering an environment for relaxation and physical activities.

On the other hand, roof gardens are expensive. Investment and maintenance costs, including structural modifications, irrigation and planting systems are enormous, and the materials are not easily found, it is hard for people to afford them. Moreover, the additional weight of the garden can cause problems for the building, especially in storms or other adverse weather conditions.

In conclusion, there are both pros and cons of roof gardens. While roof gardens bring numerous benefits, the costs and risks associated with them need to be carefully considered.