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. interact<u>ed</u>　　　B. operat<u>ed</u>　　　C. install<u>ed</u>　　　D. refund<u>ed</u>

Question 2: A. cybercr<u>i</u>me　　　B. l<u>i</u>veable　　　C. art<u>i</u>cle　　　D. book<u>i</u>ng

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. rooftop　　　D. controlled

Question 4: A. neighbourhood　　　B. underground　　　C. computer　　　D. skyscraper

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

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

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

Question 6: The urban centre of the city is the busiest and _____ crowded area.

　　　A. more　　　B. much　　　C. most　　　D. least

Question 7: Cities need to _____ the challenges of growing populations and limited resources.

　　　A. pick up　　　B. cope with　　　C. look for　　　D. gothrough

Question 8: The installation of rooftop gardens is an innovative way to increase green areas and _____ in urban centres.

　　　A. farming　　　B. skyscrapers　　　C. emissions　　　D. biodiversity

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

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

Question 10: In cities, pedestrian zones are areas _____ people can walk and no vehicles are allowed.

　　　A. which　　　B. when　　　C. whose　　　D. where

Question 11: City dwellers _____ that a smart city with computer-controlled systems can make life easier.

　　　A. agree　　　B. are agreeing　　　C. have agreed　　　D. agreed

Question 12: Interactive platforms and technologies enable residents to interact _____ the city administration.

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

Question 13: Privacy is a concern in the digital age _____ the risk of cybercrime.

　　　A. despite　　　B. due to　　　C. so that　　　D. but

Question 14: Managing resources efficiently seems very _____ for the sustainable development of cities.

　　　A. essentially　　　B. essential　　　C. inessential　　　D. inessentially

Question 15: Many people believe that a liveable city should provide a _____ of community among its residents.

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

Question 16: The city's appearance looks more _____ with the installation of new tram lines.

　　　A. modern　　　B. modernity　　　C. modernly　　　D. modernise

Question 17: I _____ that neighbourhoods in the future will operate with smart systems and use card readers for various services.

　　　A. am believing　　　B. believe　　　C. believe　　　D. am believed

Question 18: The app provides _____ recommendation to help you navigate in the city.

　　　A. way　　　B. road　　　C. route　　　D. path

Question 19: _____ farming is a way to grow plants and vegetables in spaces below the ground.

　　　A. Rooftop　　　B. Traditional　　　C. High-rise　　　D. Underground

Mark the letter A, B, C, or D to indicate the option that best completes the following exchanges.
Question 20: Mary and Mike are talking about driverless cars.

Mary: "Have you heard about driverless cars? I think they will be the future of transportation! Do you think so?"

Mike: "_____. There are still significant challenges to overcome like safety concerns."

      A. I am not sure this is true.   B. What a good idea!

      C. I am absolutely sure about it.   D. Yes, I'd like to.

Question 21: Lucy and Kathy are talking about the use of robots in the future.

Lucy: "It seems like robots will help people do some household chores in the future. Do you think that will happen?"

Kathy: "_____. With the fast development of technology, there are some hard tasks robots can help us."

      A. I don't feel like it.   B. You're right.

      C. Yes, that's fine.   D. Yes, I'm pretty sure about it.

Mark the letter A, B, C or D to indicate the word CLOSEST in meaning to the underlined word in each of the following questions.
Question 22: Urban planners try to create sustainable and **liveable** environments to improve the quality of life for their residents.

      A. loveable   B. unsuitable   C. inconvenient   D. terrible

Question 23: City **dwellers** can enjoy the convenience of having various amenities nearby.

      A. passengers   B. travellers   C. system   D. residents

Mark the letter A, B, C, or D to indicate the word(s) OPPOSITE in meaning to the underlined word(s) in each of the following questions.
Question 24: In the future, the use of **private** vehicles might be on the decrease as more sustainable modes of transportation become widely available.

      A. personal   B. individual   C. accessible   D. shared

Question 25: The introduction of trams in **urban** centres can significantly reduce greenhouse gas emissions.

      A. rural   B. suburban   C. metropolitan   D. provincial

Mark the letter A, B, C or D to indicate the underlined part that needs correction in each of the following questions.
Question 26: Many people is believing that having more green areas in the city is important for a healthier environment.

      A. is believing   B. more   C. important   D. healthier

Question 27: Using public transport like trams and buses appears efficiently to reduce traffic jams and pollution in the city.

      A. transport   B. like   C. efficiently   D. jams

Question 28: It is said that a green city is made up for environmentally friendly buildings and infrastructure.

      A. said   B. for   C. friendly   D. infrastructure

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.

    Studies show that the design of a built environment, such as a city, can have a huge impact on lifestyle choices, health and wellbeing. The implementation of accessible walkways and pedestrian routes not only helps reduce city traffic and pollution, but can (29) _____ a lasting effect on the health of communities.

Until recently, the design of a city and its pedestrianisation efforts have been selfreported and, in some cases, guessed at. Now, (30) _____, mobile tech, smart sensors and other smart city technology offers city planners the ability to analyse city design through sensor data and activity monitoring.

Smart cities can now learn from their technology and adapt city spaces to pedestrianise urban areas and promote healthier lifestyle behaviours, such as cycling and walking. City (31) _____ and officials can further elevate these efforts by deploying new technology into their pedestrian spaces.

Walking tracks such as those developed by Pavegen, encourage well-being whilst also generating renewable energy with (32) _____ footstep to help power interactive LED lighting. The kinetic smart city technology creates a unique user experience, (33) _____ extends far beyond the initial touchpoint, creating a small amount of green energy and having an even bigger impact on the user's sustainable behaviours.

Adapted from https://www.pavegen.com/blog/how-can-smart-city-technology-improve-wellbeing

Question 29: A. take   B. make   C. have   D. cause
Question 30: A. therefore   B. as   C. moreover   D. however
Question 31: A. development   B. developers   C. redevelopment   D. developing
Question 32: A. every   B. a   C. little   D. some
Question 33: A. that   B. who   C. where   D. which

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 34: 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 35: The word **"dearth"** in paragraph 2 is closest in meaning to _____.
    A. scarcity   B. surplus   C. balance   D. abundance
Question 36: 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 37: 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 38 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 https://ubidots.com/blog/the-key-challenges-for-smart-cities/

Question 39: 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 40: 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 41: The word **"alleviate"** in paragraph 3 mostly means _____.

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

Question 42: 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 43: What does the phrase **"their"** in paragraph 3 refer to?

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

Question 44: The word **"thrive"** in paragraph 4 is closest in meaning to _____.

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

Question 45: 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.

Mark the letter A, B, C, or D to indicate the sentence that is closest in meaning to each of the following questions.

Question 46: I am thinking of using public vehicles to go to school because they are good for the environment.

    A. I am thinking of using public vehicles to go to school although it is good for the environment.

    B. I am thinking of using private vehicles to go to school due to its benefits to the environment.

    C. I am thinking of using public transport to go to school because of its benefits to the environment.

    D. I am thinking of using public transport to go to school, therefore, it is good for the environment.

Question 47: Some people believe that smart cities in the future will be more liveable than cities in the past.

    A. Some people believe that smart cities in the future will be less liveable than cities in the past.

    B. Some people believe that cities in the past will be less liveable than smart cities in the future.

    C. Some people believe that smart cities in the future will not be as liveable as cities in the past.

    D. Some people believe that cities in the past will be as liveable as smart cities in the future.

Question 48: Only when we manage to reduce pollution and traffic jams can the quality of life in cities be improved.

    A. The quality of life can be improved until we manage to reduce pollution and traffic jams.

    B. It is not until we manage to reduce pollution and traffic jams can the quality of life be improved.

    C. It is until we manage to reduce pollution and traffic jams that the quality of life can be improved.

    D. Not until we manage to reduce pollution and traffic jams can the quality of life in cities be improved.

Mark the letter A, B, C, or D to indicate the sentence that best combines each pair of sentences in the following questions.

Question 49: The rise of smart cities may increase the risk of cybercrime. However, the development of robust security measures can help to protect residents' privacy.

    A. Because the rise of smart cities may increase the risk of cybercrime, the development of robust security measures can help to protect residents' privacy.

    B. Although the rise of smart cities may increase the risk of cybercrime, the development of robust security measures can help to protect residents' privacy.

    C. The rise of smart cities may increase the risk of cybercrime, leading to the development of robust security measures which help to protect residents' privacy.

    D. The rise of smart cities may increase the risk of cybercrime, so the development of robust security measures can help to protect residents' privacy.

Question 50: Parking spaces for private vehicles might decrease. This encourages residents to use public transport more often.

    A. Parking spaces for private vehicles might decrease, encouraging residents to use public transport more often.

    B. Parking spaces for private vehicles might decrease, which prevents residents from using public transport frequently.

    C. Parking spaces for private vehicles might decrease, which encourages residents to use personal transport more often.

    D. Parking spaces for private vehicles might decrease, discouraging residents from using public transport frequently.