Read the articles below then answer the questions that follow.

Supreme Court Justice Ruth Bader Ginsburg

Ruth Bader Ginsburg, a Supreme Court justice and feminist icon passed away on September 18, 2020, at her home in Washington, D.C., due to complications from metastatic pancreatic cancer. President Bill Clinton elevated the 87-year-old to the nation's top court in 1993, making her one of the longest-serving Supreme Court Justices. She was also the second woman to hold this office, after Justice Sandra Day O'Connor. Chief Justice John Roberts said in a statement on Friday, "Our nation has lost a judge of historic importance. A colleague at the Supreme Court has passed away. Today, we grieve, but we are confident that future generations will remember Justice Ruth Bader Ginsburg as we did: as a tireless and unwavering defender of justice."

Joan Ruth Bader was born on March 15, 1933, in Brooklyn, New York, to Jewish immigrants Celia and Nathan Bader. She was awarded a full scholarship at Cornell University at a time when few women pursued higher education due to her early academic excellence. Ms. Ginsburg, who was pursuing a bachelor's degree in government, met her future husband, Martin (a.k.a. "Marty") Ginsburg, at this institution. They were married shortly after she graduated in 1954. The young couple relocated to Fort Sill, Oklahoma, so that Marty could complete his Reserve Officers' Training Corps military training. Here, Ms. Ginsburg encountered job prejudice against women for the first time.

Despite earning a high score on the civil service examination, she was only granted a typing position. Even this position was terminated when she became pregnant with their first kid. Two years after Marty's acceptance to Harvard Law School, the Ginsburgs relocated to the East Coast. A year later, Ms. Ginsburg was also accepted into the programme. However, as one of just nine women in a class of 500, she suffered discrimination at the Ivy League institution and was even questioned by the dean about why she was occupying a spot that "should go to a guy." Marty was subsequently diagnosed with testicular cancer, which only made matters worse. Marty stated in a 1993 NPR interview, "This left Ruth with a 3-year-old child, a rather ill husband, the law review, classes to attend, and feeding me."

Marty healed, and following graduation, he accepted a position at a New York legal firm. Ms. Ginsburg, who had one more year of schooling to complete, switched to Columbia University to earn her legal degree. Despite graduating at the top of her class, she was unable to secure employment with a law firm. Even though she was recommended for a clerkship at the Supreme Court, she was never interviewed for the position. Her first clerkship was not secured until her mentor, Columbia law professor Gerald Gunther, persuaded Federal District Court Judge Edmund Palmieri to appoint her. Mr. Palmieri was so delighted with Ms. Ginsburg's performance that he extended her contract for an additional year.

In 1963, Ms. Ginsburg was hired as a professor at Rutgers Law School, where she began her struggle against gender discrimination. However, rather than seeking out female clients, she focused on situations in which men challenged unfavourable legislation. She believed that opposing policies that reinforced gender bias would benefit everyone. If the plaintiffs were men, it would likewise be easy to convince the all-male Supreme Court to make the move. In one of her experiences, for instance, the plaintiff was a man whose wife, the primary breadwinner, had died after childbirth. The husband, who

desired to spend more time with his newborn, fought to secure Social Security benefits, which at the time were accessible only to widows and not widowers.

President Jimmy Carter nominated Ms. Ginsburg to the US Court of Appeals for the District of Columbia in 1980 due to her exceptional oratory talents, which won her five of the six cases she presented to the Supreme Court. In 1993, President Bill Clinton sought her out to fill the vacancy left by retiring Justice Byron White on the Supreme Court. Although she was not the first candidate on his list, it only took one meeting with Ms. Ginsburg to persuade the president that she was the ideal candidate for this lifelong position. She had the same influence on the bipartisan Senate, which unanimously approved her nomination by a vote of 96-3. Throughout her 27 years on the Supreme Court, Ms. Ginsburg frequently advocated against unjust legislation. However, her most vehement disagreements were always in defence of women's rights. A 1996 verdict overturning the long-standing male-only entrance norm at the state-funded Virginia Military Institute was one of her greatest victories.

Ms. Ginsburg, who was just under five feet tall, looked to have boundless vitality both inside and outside of the courtroom, despite her fragile appearance. She rode horses and went paragliding well into her seventies. She starred in the non-singing role of the Duchess of Krakenthorp on the opening night of the Daughter of the Regiment in 2016 as an opera devotee. Her hard daily fitness routine, which included pushups, planks, and weight-lifting, spurred her longtime personal trainer Bryant Johnson to publish a book about how Ms. Ginsburg maintained her strength throughout her 11-year struggle with cancer.

Ms. Ginsburg, who is survived by two children and two grandchildren, will lay in repose for public observation under the portico at the top of the front steps of the Supreme Court building on September 23 and 24. The court issued a statement inviting the public to pay respects in front of the Building from roughly 11 a.m. to 10 p.m. on Wednesday, September 23, and from 9 a.m. to 10 p.m. on Thursday, September 24. On Tuesday, September 29, 2020, the day following Yom Kippur, the holiest day of the Jewish calendar, the trailblazer will be interred at Arlington National Cemetery with her husband Marty, who passed away in 2010. Ms. Ginsburg's commitment to levelling the playing field for individuals of all colours, genders, races, and religions will continue to motivate people around the world to combat injustice. As Ms. Ginsburg stated concisely, "Fight for the causes that are important to you. However, do so in a manner that encourages others to join you."

Answer the following questions by choosing the letter of the best answer.

1 Where did Ms. Ginsburg first encounter workplace discrimination against women?

- A. In D.C. where she works as a Supreme Court Justice.
- **B.** In Oklahoma where her husband was to finish his military training.
- C. In the East Coast where she attended Harvard Law School.
- D. In New York where her husband worked at a legal firm.

2 Which of the following did NOT happen to Ms. Ginsburg while she was attending Harvard Law?

- **A.** She experienced discrimination in school due to her gender.
- **B.** She was diagnosed with testicular cancer.
- C. She was taking care of a three-year-old child on her own.
- D. She was feeding her husband who was suffering from cancer.

3 The main idea of the fourth paragraph is

- **A.** To persuade readers that as a woman in the field of law, it is hard to secure a job at a law firm.
- **B.** To entertain readers how her performance in her job was exemplary that her employee extended her contract.
- **C.** To compare the differences between working in a law firm and working as a law professor.
- **D.** To explain that even when she was top of her class, her gender hindered her from getting a job right away.

4 When Ruth became a professor at Rutgers Law School, she concentrated on situations where men contested unfavourable rulings. Why?

- **A.** She believed that due to the number of males in the court of law, female clients will only be disadvantageous for her.
- **B.** She knew that if she focused on situations where women are involved, her struggle against gender discrimination will increase.
- **C.** She thought that conflicting laws that supported bias in gender would be advantageous for everybody.
- **D.** She believed that if her clients were women, it would be easy to convince the all-male Supreme Court to make a move.

5 In 1980, Ruth was nominated to the US Court of Appeals for the District of Columbia. What does this say about her?

- **A.** She has strong persuasion skills since she made President Clinton believe that she was the ideal candidate for the position.
- **B.** She has a powerful influence on the Senate which helped her win the position.
- C. She is unique and talented and gets everything her way.
- D. She is an outstanding woman and an unwavering defender of justice.

6 What does the line "Ms. Ginsburg, who was just under five feet tall, looked to have boundless vitality both inside and outside of the courtroom, despite her fragile appearance" mean?

- A. She never let her delicate build get in her way.
- **B.** She often got bullied at her job for her size.

- **C.** She did not earn the ideal height required for her job.
- **D.** She compensated for her lack in height by doing a hard fitness routine.

7 What was Supreme Court Justice Ruth Ginsburg committed to in her entire lifetime?

- A. To overcome the discriminations she experienced throughout the years due to her gender.
- B. To level the playing field for all races, genders, and religions.
- **C.** To encourage others to join your cause whether it is beneficial or not.
- **D.** To create a safe space for women in all careers that were made for men.

8 What was the reason for Supreme Court Justice Ginsburg's passing?

- A. Poisoned by her husband who was angry at her for overshadowing his accomplishments.
- B. The rise of anti-feminists who wanted to lose a woman of great influence.
- C. Complications from metastatic pancreatic cancer.
- D. Jealous men in the Supreme Court who wanted her position.

Canines As Allies Against COVID-19

One of the greatest difficulties in combating the rapid spread of COVID-19 is detecting and isolating infected individuals before the onset of symptoms, which typically takes between 3 and 13 days. Now, frontline workers may receive assistance from canines that can "smell out" the disease even if the patient is asymptomatic, which means that he or she never exhibits the symptoms linked with COVID-19. Bio-detection canines are not a novel concept. In the past, canines have been successfully trained to identify multiple fatal diseases much before the onset of symptoms in patients. These include identifying stomach cancer patients in Japan by smelling their urine samples and malaria patients in the Gambia by smelling their feet.

Due to their very sensitive noses, which are equipped with 300 million scent receptors, dogs are the animal of choice. Comparatively, humans have only 6 million scent sensors! Additionally, dogs possess a second smell sensor that humans lack. The vomeronasal, or Jacobson's organ, is located near the bottom of the nasal canal and is able to detect odours that are typically undetected. Professor James Logan, head of the department of disease control at the London School of Hygiene and Tropical Medicine, told The Guardian, "We could identify a teaspoon of sugar in a cup of tea, but a dog could detect the same amount in two Olympic-sized swimming pools." This is the level.

The key to recruiting bio-detection canines is determining whether or not COVID-19 patients emit a distinctive odour. Logan and his colleagues, who have collaborated with the non-profit Medical Detection Dogs on this vital research, are optimistic. The specialist says, "We've been contacted by a large number of people, notably medical personnel, residents of nursing homes, and hospital patients who say, "We can smell it." I can walk into a room and immediately identify patients with Covid-19. This is not scientific evidence, so we must take it with a grain of salt, but it offers us hope that it does exist."

To validate the anecdotal claims, the researchers sent sterilised socks and stockings that absorb and retain body odours, along with face masks, to over 3,000 asymptomatic frontline workers in the United Kingdom. The hospital personnel have been instructed to wear the garments for a predetermined amount of time before returning them to Logan's lab for examination. "We'll end up with a large number of samples from uninfected people and a smaller number of samples from sick people," the researcher told The Guardian. "And that's alright. Because we require several controls. We require a great deal of ambient noise for the dogs to ignore."

Using a tennis ball, Medical Detection Dogs is training six dogs - a mixture of Cocker Spaniels, Labradors, and one Labradoodle - to detect specific odours. The co-founder of the non-profit, Dr. Claire Guest, explains that the dogs' keen noses will detect not only the tennis ball, but also any lingering odours, even from objects that may have touched the ball for less than 30 seconds. Once the dogs are ready, Logan's team will cut the labelled sock, stocking, and face mask samples into little pieces and give them to the dogs and their handlers. The trial will proceed to the next step if COVID-19 indeed has a distinct odour and the canines are able to correctly identify the things worn by persons infected with the virus. This will involve deploying canines to high-density public spaces, such as airports and railway stations, to identify sick individuals.

10% of a departing flight of 500 passengers may be asymptomatic or pre-symptomatic, according to Guest. "The dog may instantly say, 'Bang, bang, bang, You, you, you.' This is a half-second whiff. The dog will not have the last say. The individual will be evaluated. However, there is currently no other method for promptly screening persons in this manner, especially asymptomatics."

The researchers' Logan and Guest are not the only ones training canines to detect COVID-19. A team of multidisciplinary experts led by Dr. Cynthia Otto, professor of Working Dog Sciences and Sports Medicine at the University of Pennsylvania, is also working on a study of a similar nature. Beginning in early May 2020, the researchers exposed eight Labrador Retrievers to COVID-19-positive saliva and urine samples in the laboratory for three weeks. The purpose of the method, known as odour imprinting, was to enable the dogs to recognise any specific odour linked with the condition.

Scientists have begun the second part of the research, which involves exposing trained dogs to new human samples, some of which contain coronavirus traces and others which do not. If the Labradors can accurately detect contaminated samples, they will be put to work in heavily trafficked public locations to assist locate COVID-19 carriers. Although bio-detection canines will surely be of assistance, implementing the simple precautions recommended by experts is the most effective approach to avoid the infectious disease. These include frequent hand-washing, maintaining a minimum six-foot distance from those outside your immediate social structure, and wearing a facial covering in public.

Answer the following questions by choosing the letter of the best answer.

9 How can dogs become valuable allies in the fight against COVID-19?

- **A.** They are trained to rescue patients who are having a hard time breathing due to the virus.
- **B.** They can detect the virus just by scenting the stool samples of patients.
- C. They can sniff out the odour of the virus even if the patient is asymptomatic.
- **D.** They can sense the virus by smelling the feet of patients.

10 In comparison to humans, why do dogs have very sensitive noses?

- A. Because a dog's brain is obsessed with examining scents while humans don't.
- **B.** Because they have a ton of scent receptors and a second smell sensor that humans don't have.
- C. Because dogs, like other animals, devote a lot of brain power to interpret different smells.
- **D.** Because dogs' noses can sense thermal radiation while human noses cannot.

11 How do researchers intend to train canines to detect COVID-19 by smelling infected patients?

- **A.** Researchers are doing tests to find out if COVID-19 patients emit a certain skin colour when infected.
- **B.** Researchers are releasing canines to high-density public spaces to hastily identify COVID-19 patients.
- **C.** Researchers are conducting experiments to determine whether COVID-19 patients generate a particular odour.
- **D.** Researchers are distributing face masks to asymptomatic frontline workers in an effort to determine if COVID-19 patients exhale the same odour that canines can detect.

12 According to the article, which of the following is NOT helpful in preventing COVID-19 infection?

- **A.** Frequent hand-washing
- **B.** Maintaining a minimum six-foot distance from people
- C. Wearing a facial mask in public
- **D.** Using aerosol sprays in public spaces

13 What can be said about today's world of science?

- A. It is on a dead-end
- B. It is evolving and improving
- C. It is relying mostly on researchers, not on scientists
- **D.** It is wasting money on countless trials that have not created an infallible solution

14 What mood can be established from the article?

A. Futuristic and foolish

- B. Upbeat and full of pessimism
- C. Hopeful and positive
- D. Persistent and irrational
- 15 Which of the following is the best summary for the line, "Although bio-detection canines will surely be of assistance, implementing the simple precautions recommended by experts is the most effective approach to avoid the infectious disease"?
 - A. Prevention of the virus is better than cure.
 - B. Cure is more essential than bio-detection canines.
 - C. Bio-detection dogs are not yet sufficient in detecting COVID-19.
 - D. Simple precautions lead to better results than bio-detection dogs.

16 What is the main purpose of paragraph 7?

- A. To describe the history of how training dogs to detect COVID-19 started.
- **B.** To enumerate the dog breeds that work best in detecting COVID-19 in patients.
- **C.** To compare Logan and Guest's research with Dr. Cynthia Otto's research.
- **D.** To explain that there are other researchers committed to training dogs in detecting COVID-19.

World's Whitest White Paint = Reduce Global Warming?

Given that white was one of the first colours used in art around the 15th century, one could assume that there is little opportunity for improvement in terms of its "whiteness." As it turns out, this is not the case. Recently, a group of scientists led by Xiulin Ruan, a professor of mechanical engineering at Purdue University in Indiana, unveiled an "ultra-white" paint that they say could help tackle climate change.

The scientists, who spent six years developing the "whitest white" paint in the world, say that the various options make surfaces warmer rather than cooler. This is because they reflect only 80% to 90% of the sun's rays and cannot cool the outside below the ambient temperature. The newly disclosed ultra-white paint not only reflects 98.1% of sunlight but also resists the absorption of surface infrared heat.

"We don't see much difference between 90% and 98%, but we must consider the absorption of sunlight," explains Dr. Ruan. "Our paint absorbs 1.9% of the sun's rays, while those commercial paints absorb 10% of the sun's rays or five times as much as our paint absorbs. They appear white, and they are indeed white, yet they lack the ability to cool beyond the ambient temperature.

In lieu of titanium dioxide, a high concentration of barium sulphate is employed as a pigment in the ultra-white paint, which contributes to its extraordinary cooling properties. The chemical components found in cosmetics and photographic films do not absorb ultraviolet light. The researchers also adjusted the particle size of the chemical component to maximise the transmission of sunlight.

Joseph Peoples, a Ph.D. student at Purdue and participant in the study, remarked, "A large concentration of particles of varying sizes offers the paint the broadest spectral dispersion, leading to the maximum reflectivity."

Tests conducted outside revealed that the newly designed paint may keep surfaces 8°F cooler than the ambient temperature during the midday sun and up to 19°F colder at night. Given that the paint is equally effective in the winter, reducing surface temperatures by 18°F when ambient temperatures are below 43°F, it would be most beneficial in regions with year-round hot weather.

Dr. Ruan told the BBC, "We performed a very preliminary estimate." We estimate that we would only need to paint 1 percent of the Earth's surface with this paint – say a region covered in rocks where no one lives – to combat the climate change trend.

Hashem Akbari, a professor of building, civil, and environmental engineering at Concordia University, believes that the true benefits of the paint can only be determined after a few years of use. "Smoke and dirt tend to reduce the surface's reflectance," Akbari told Gizmodo.com. "If they begin with super-duper 95% reflectivity, air contaminants, droplets, and soot could build on the surface, reducing the reflectants."

Meanwhile, Andrew Parnell, who works on sustainable coatings at the University of Sheffield in the United Kingdom, is concerned that the carbon dioxide released by the mining of barium sulphate could negate the decreased energy expenditure induced by ultra-white paint. He believes that green or living roofs, which are covered with plants, may be a more feasible and efficient means of combating global warming.

The Purdue researchers, who published their results on April 15, 2021, in the journal ACS Applied Materials & Interfaces, are unfazed by the critics. In addition to working with manufacturers to bring ultra-white paint to market, the team is designing additional "energy-efficient" hues. Dr. Ruan has even alluded to the possibility of developing a paint that reflects heat in the summer and absorbs it in the winter.

Answer the following questions by choosing the letter of the best answer.

17 What makes the commercial type of white paint different from Dr. Ruan's white paint?

- A. Commercial white paint has a different hue and temperature compared to Dr. Ruan's paint.
- B. Commercial white paint contains lesser toxic ingredients than Dr. Ruan's white paint.
- **C.** Commercial white look white yet they are incapable of cooling past the ambient temperature.
- **D.** Commercial white paint absorbs 1.9% of the sun's rays, Dr. Ruan's white paint absorbs five times as much.
- 18 The following are other substances utilise titanium dioxide besides Dr. Ruan's paint EXCEPT

- A. Cosmetic brush
- B. Makeup
- C. Camera Films
- **D.** Sunscreen

19 The newly formulated paint can maintain surfaces cooler than the ambient temperature during the day and colder at night. What areas would benefit from the paint the most?

- A. Locations with cold weather throughout the year.
- **B.** Locations with hot weather all through the year.
- **C.** Locations with four seasons year-round.
- **D.** Locations with cold and hot temperatures the whole year.

20 According to the article, which is NOT true about using plants on roofs?

- A. It might be a more efficient way in fighting global climate change.
- **B.** It might be a more practical approach to fighting global warming.
- **C.** It can be a more detrimental method to combating global warming.
- **D.** It may be a more feasible strategy for combating global warming.

21 Which of the following statements about the newly found white paint is TRUE?

- A. It makes a lot of surfaces warmer rather than cooler.
- **B.** It reflects the sun's rays and fights the absorption of surface infrared heat.
- **C.** It absorbs five times as much of the 1.9% sunlight that commercial white paint absorbs.
- **D.** It reflects 80-90% of the sun's rays and cannot cool the outside below the ambient temperature.

22 Which is the best summary for paragraph 1?

- **A.** Scientists have unveiled a never-before-seen ultra-white paint, just when people thought there would be no whiter paint than the commercially available ones.
- **B.** White paint has been since the 15th century, but it wasn't until lately that people realised how many colours white paint has.
- **C.** Scientists have created an ultra-white paint that is equally whiter than any commercially available paint.
- **D.** Although white paint has been around for a very long time, only recently have people begun to appreciate the wide range of tones that it encompasses.

23 What is the main idea of paragraph 8?

- A. To enumerate Akbari's findings of the use of ultra-white paint in the environment.
- **B.** To describe Akbari's long history in civil and environmental engineering to prove his legitimacy.

- **C.** To explain Akbari's belief that the paint's real benefits can only be decided after years of usage.
- **D.** To compare Akbari's belief with Ruan's in terms of the use of ultra-white instead of the commercially available white paint.

24 After reading the article, besides the manufacturing of the ultra-white paint, what else is Dr. Ruan working on?

- A. Creating additional colours that do not utilise fossil fuels.
- B. Designing additional colours that may conduct electricity for commercial use.
- C. Developing more colours that are "eco-friendly".
- D. Coming up with more colours that are efficient in the consumption of energy.

Rescuing Endangered Giraffes On Kenyan Island

In 2011, eight Rothschild's giraffes were relocated to Longicharo Island, a rocky peninsula in Western Kenya on Lake Baringo. The scientists thought that by isolating the endangered species from poachers, their numbers would increase. Intense precipitation in August of 2020, however, led the lake water levels to increase significantly, isolating the area from the mainland and decreasing the once-luxuriant 100-acre habitat to around 8 acres. Local rangers from the adjacent Ruko Community Wildlife Conservancy originally provided food for the malnourished giraffes, but as the island shrank, it became vital to relocate the animals to a safer habitat.

Although giraffes can swim, Lake Baringo's crocodile-infested waters necessitated a ferry crossing. In December 2020, the rangers collaborated with the UK-based non-profit Save Giraffes Now and the Kenya Wildlife Society (KWS) to construct a custom barge, which the president of Save Giraffes Now, David O'Connor, describes as an engineering wonder. "The rectangular steel structure was planned and constructed to accommodate tall, hefty giraffes," he explains. "For buoyancy, the barge floats on a series of empty drums. As the barge was handled gently by boats, reinforced sides prevented the animals from escaping."

Asiwa, a female giraffe stranded alone in a swampy area of the island with no food sources, was their top priority. However, it was difficult to convince the gentle giant to board the barge. O'Connor states, "The giraffes have no idea that you're attempting to help them. They believe you to be a predator. They are actively working against you, which makes things even more difficult."

After numerous futile attempts to entice Asiwa onto the ferry with mangoes and other delicacies, the scientists were forced to sedate her. Although this method is commonly used to transport large animals, it is not recommended for giraffes since the fluctuation in blood pressure could cause brain damage or cause them to choke on their own saliva. "It is not like an elephant or a rhinoceros, where you can simply dart it and it will fall over and be alright," O'Connor explained. "Giraffes are similar to Formula One race cars. You can't play with their internals excessively, or they'll have serious problems."

To avert mistakes, the rescuers administered a mild anaesthetic to the giraffe before swiftly guiding her onto the boat. So that Asiwa would not worry, they stuffed socks into her ears and covered her head

with a burlap hood. Photographer Ami Vitale, who filmed the rescue, remarked, "It was amazing to see her calmly get off the boat after the blindfold was removed as if nothing had occurred." It was truly a scene that could have been found in the Bible.

The next day, a young giraffe named Pasaka was transported in a similar manner. On January 27, 2021, a third giraffe, a male named Lbarnoti, was rescued. In contrast to Asiwa and Pasaka, he was excited to board the barge and chew on tasty acacia pods for the duration of the cruise. Susan Myers, chief executive officer of Save Giraffes Now, states, "Each giraffe possesses its own personality. Some are really scared, while others are courageous and eagerly board the boat."

The rescuers want to transport the remaining six giraffes, including Lbarnoti's calf Noelle, to the 44,000-acre Ruko Community Wildlife Conservancy by March 2021, if the weather cooperates. "Rescuing them is not the end of the story," O'Connor argues. The attempt to repopulate the entire Western Rift Valley with this species of giraffe, which became locally extinct 70 years ago, is barely beginning.

Rothschild's giraffes, which are endemic to South Sudan, northern Uganda, and western Kenya, are among the tallest members of their species, second only to Masai giraffes. The herbivorous creatures can be distinguished from other giraffes by their coat, which consists of dark orange, brown, and beige patches. They lack marks on their lower legs as well. Once abundant over the plains of Kenya and Uganda, habitat degradation, drought, and poaching have drastically reduced their population. Save Giraffes Now believes that there are fewer than 3,000 Rothschild's giraffes left in the wild, of which 800 are in Kenya, making them the most endangered of their species.

Answer the following questions by choosing the letter of the best answer.

25 Why was it necessary to relocate the giraffes to a safer environment?

- **A.** A heavy rain caused the lake to rise and submerge the island where the giraffes lived.
- **B.** A heavy rain made trees on the island fall causing the giraffes to lose their food source.
- C. A heavy rain caused the water levels surrounding the island to rise significantly.
- **D.** A heavy rain caused the giraffes to become malnourished so they needed to be relocated.

26 What actions did the rangers take to relocate the giraffes?

- **A.** They worked in collaboration with non-profit organisations to eradicate the crocodiles inhabiting the lake where giraffes swim.
- **B.** Together with non-profit organisations, they developed a barge specifically designed to accommodate tall giraffes.
- **C.** They teamed with Save Giraffes Now and the Kenya Wildlife Society to develop a ship that the Guinness Book of World Records will soon recognise as an engineering marvel.
- **D.** For the purpose of relocating the giraffes, a long bridge was constructed out of empty drums gathered from nearby humans.

27 Why was it difficult to persuade giraffes to get on a barge?

- **A.** Because giraffes quickly become accustomed to a place and find it extremely difficult to leave.
- **B.** Because the giraffes are ignorant towards barges so they start to panic when they see one.
- C. Because they have always despised humans as they have caused their extinction.
- **D.** Because they are scared and clueless that humans are just trying to help them.

According to the text, unlike other large animals, sedating a giraffe is not recommended. How can this be?

- **A.** Because you cannot simply dart them like an elephant and they will fall over and be okay as their skin reacts differently to a dart.
- **B.** Because a flux in their blood pressure may induce brain injury or lead them to suffocate on their own drool.
- **C.** Because extensive manipulation of their blood pressure will cause severe complications.
- **D.** Because their low blood pressure may cause brain damage or choke them with their own saliva.

29 How did the giraffe react as soon as it was allowed to get off of the barge?

- **A.** The giraffe was still sedated so it did not show any reaction.
- **B.** The giraffe was intensely panicking as it got off the barge.
- **C.** The giraffe calmly got off the barge as if nothing happened.
- D. The giraffe ran straight out of the barge out of fear.

30 In comparison to the first two giraffes, the third giraffe reacted differently when it was transported. What does this say about the giraffes?

- A. Just like humans, they also have their own unique character.
- **B.** Just like humans, giraffes are pretty much scared of barges all the time.
- C. Just like humans, giraffes enjoy savouring tasty sweets like fruits.
- **D.** Just like humans, they want to be surrounded by other giraffes.

31 Which of the following best summarises the 7th paragraph?

- **A.** The remaining giraffes are to be transported to the Ruko Community Wildlife Conservancy because they went extinct in the area seventy years ago.
- **B.** The rescuers wish to move the remaining giraffes, including the calf Noelle, to a Wildlife Conservancy because the species went extinct in the region seventy years ago.
- **C.** Since giraffes went extinct in the area seventy years ago, rescuers hope to send the surviving six to the Ruko Community Wildlife Conservancy.

D. The rescuers intend to transport and attempt to repopulate the giraffes that had been locally extinct for seven decades.

32 According to the article, the following are reasons for the Rothschild's giraffes' decrease in population EXCEPT

- A. Deterioration of the natural environment.
- B. Spread of diseases among giraffes.
- C. A prolonged period of abnormally low rainfall, leading to a shortage of water.
- D. Illegally hunting or catching a species in violation of governmental protection regulations.

Meet Naomi Osaka - Japan's First Grand Slam Winner

Naomi Osaka was just two years old in 1999 when Serena Williams won her first US Open title by defeating the world's top-ranked female tennis player, Martina Hingis. Since then, Naomi has witnessed her role model dominate the tennis world. Naomi astonished the world by winning the 2018 Women's US Open Singles Championship on Saturday, September 8. Naomi's first Grand Slam victory was especially sweet because she is the first Japanese tennis player to earn this distinction.

Not only is Naomi's tennis career inspired by that of her idol, but it is also frighteningly comparable. Naomi, who was born in Osaka, Japan to a Japanese mother and a Haitian-American father, migrated to the United States at the age of three. After observing the Williams sisters at the 1999 French Open, Naomi's father was inspired to introduce tennis to Naomi and her older sister. Like Serena's father and first coach, Richard Williams, he possessed limited knowledge of the sport. However, this did not dissuade him. Armed with educational DVDs and books, he took both girls to the local tennis courts every day and made them hit several buckets of balls.

The family relocated from Long Island to Florida in 2006, where the homeschooled girls practised tennis on public courts. By 2013, Naomi had become a world-class tennis player and was prepared to turn professional. Her father decided to enrol her in the Japanese Tennis Association because of concern that she would not receive sufficient support from the United States Tennis Association. At the 2014 Bank of the West Classic, Naomi defeated former US Open champion Samantha Stosur at the age of sixteen, garnering worldwide notice.

Two years later, she reached her maiden Women's Tennis Association (WTA) finals at the 2016 Toray Pan Pacific Open, and in 2017, she defeated defending U.S. Open champion Angelique Kerber in the first round. Since then, the youthful tennis player has defeated numerous tennis legends. Her first major WTA triumph occurred in March of 2018, as she won the BNP Paribas Open in Indian Wells, California. A few weeks later, Naomi once again made news by defeating her hero Serena Williams in the opening round of the 2018 Miami Open.

Many analysts, however, ascribed the victory to the fact that Serena, who had just returned to competitive tennis after an 8-month maternity leave, was still struggling to regain her peak form. The conflict between Serena and chair umpire Carlos Ramos overshadowed Naomi's second, definitive

two-set triumph over her hero at the 2018 US Open. During the second set, Serena's coach, Patrick Mouratoglou, was caught giving her hand signals, which sparked the controversy. Ramos issued Serena a code infraction since coaching players at big tournaments is prohibited.

Serena took offence at being accused of "cheating" and urged Carlos to reconsider his decision, claiming she had not observed the gesture. Serena broke her racquet after dropping her serve in the fifth game of the second set, resulting in a second code violation that cost her a point. When the following match began with Naomi leading 15-0, Serena demanded that Carlos consider reversing the initial code violation. When the umpire refused to change his position, Serena said, "You stole a point from me!"

Carlos responded to the claim by assigning her a third code violation, this time for verbal abuse, which resulted in Serena losing the entire match. Naomi, who was already ahead 4-3 in the second set, suddenly led by two games. When he called the perplexed players to the court to explain the rationale for the score change, a surprised Serena laughed in amazement and requested to talk to tournament referee Brian Earley, who went onto the floor with a supervisor. Serena's claims that the umpire's judgments were unjust and that this had occurred to her too frequently were met with indifference. Although she continued to play and even won a game, Serena never fully recovered from the altercation, and the tournament ended shortly thereafter.

The crowd's booing of the umpire's rulings ruined Naomi's first big victory. While Serena was able to calm down the fans, it did little to cheer up the bashful player, who instead of celebrating her victory said, "I'm sorry it had to end this way." Naomi remains in utter awe of her idol, stating, "I will always remember the Serena that I adore." Given Serena's tennis prowess and an unrelenting desire to remain at the top of her game, there is no doubt that the two champions will meet on the court numerous times in the future — ideally under "normal" circumstances.

Answer the following questions by choosing the letter of the best answer.

33 What did Naomi's father do to compensate for his lack of tennis knowledge?

- **A.** He conducted independent study and observed professional tennis matches, then applied his findings on himself and Naomi.
- **B.** He studied newspaper editorials, viewed rebroadcasts of games, and practised on his own.
- **C.** He viewed multiple interviews with professional tennis players and instructed Naomi and her sister to imitate the way they answer questions.
- **D.** He watched instructional tapes, read educational books, and made Naomi and her sister hit several buckets of balls everyday.

34 Where did Naomi and her sister start practising tennis?

- A. Private tennis courts
- B. Public tennis courts
- **C.** Government-owned tennis courts

D. Tennis courts where his father worked

35 Why did Naomi join the Japanese Tennis Association as opposed to the United States Tennis Association?

- A. Because her father feared bigotry in the U.S. Tennis Association due to the fact that they are illegal immigrants.
- **B.** Because her father was scared that her gender may result in unequal treatment from the U.S. Tennis Association.
- **C.** Because her father was afraid that the U.S. Tennis Association would be unfair to her because of her race and gender.
- **D.** Because her father was concerned that she would not receive sufficient support in the U.S. Tennis Association.

36 Naomi has defeated a multitude of great tennis players. Where did she earn her first major win in the Women's Tennis Association?

- A. Toray Pan Pacific Open
- B. BNP Paribas Open
- C. Miami Open
- D. US Open

37 Naomi defeated Serena Williams in the opening round of the 2018 Miami Open. However, many people defended Williams. What was the excuse people gave?

- A. Williams was treated unfairly and unreasonably by the umpire.
- **B.** It was a calculated loss, as they were obviously aware that Williams required controversy to regain fame.
- **C.** Williams was still battling to regain her top form since she had recently returned to competitive tennis after maternity leave.
- D. Naomi's victory over a tennis legend such as Williams was the result of beginner's luck.

38 What sparked the conflict between Williams and the umpire, Ramos?

- A. Williams' coach was seen giving her hand signals but she claimed she was unaware of them.
- **B.** The umpire issued three code violations to Williams, which she believes were unwarranted.
- C. Williams shattered her racket out of anger, prompting the umpire to punish her with a violation.
- **D.** The umpire awarded Williams a "verbal abuse" violation, which caused her to lose her wits.

39 The following are themes explored in the article EXCEPT

A. Physical wellbeing

- **B.** Sponsorship, licensing and advertising in sport
- **C.** Cultural differences
- **D.** Coaching and instructional strategies

40 How did Naomi feel towards Williams' behaviour in the 2018 US Open?

- A. Naomi felt that Williams' match was unfair due to the booing of the umpire's decisions by the crowd.
- **B.** Naomi was unable to enjoy her victory despite the fact that Williams had calmed down her angry fans.
- **C.** She stayed in awe of her idol and declared that she will never forget the Williams whom she adores.
- **D.** Naomi believed a future rematch was necessary, as she believed her victory was insufficient due to its harsh preconditions.