Part 2 Careful Reading

In this part, there are **20** questions altogether. You will have **50** minutes to complete this part. Please read the passages **carefully** to find the answers. Please write your answers on your answer sheet.

Questions 21-25 | Questions 26-29 | Questions 30-33 | Questions 34-40

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U.S. oral surgeon Dr. Mansoor Madani says he has developed an alternative to tonsillectomies that works just as well as the traditional surgery, but has none of the drawbacks. This procedure, known as tonsillar coblation, uses radiofrequency-generated heat to shrink tonsils. In the procedure, Madani inserts a heat-emitting probe about the size of a needle into three spots on each tonsil, and keeps it in each position for around 10 to 15 seconds. The probe--heated to between 120 and 150 degrees Celsius--slowly shrinks the tonsils like a water balloon being stuck with a pin.

"It's just like when you put certain foods in the microwave and they shrink. It's very similar to microwave energy, but the heat isn't nearly as high," said Madani, an associate professor of oral and maxillofacial surgery at Temple University, and director of The Center for Corrective Surgery Techniques in Bryn Mawr.

Radiofrequency-generated heat has been used in the field of medicine for more than a century. It is currently being used in cardiac surgery, neurosurgery, orthopedic surgery, and urology. Madani himself had been using the technology in parts of the nose and mouth for several years, to treat chronic nasal congestion and snoring, before trying it out on tonsils.

Tonsils are the two lumps of tissue in the back of the throat on either side of the tongue, each about the size and shape of a large olive. Their purpose is to "catch" infections in the first two to three years of childhood, sampling the environment in order to help the child develop immunities or antibodies. Yet in some cases, the tonsils also catch incoming germs, and this causes them to become infected. A medical study has shown that children who suffer from frequent tonsil infections (more than two or three times each year) are generally healthier after their tonsils are removed. In addition, children who must have their tonsils removed have been found to suffer no loss in their resistance to infections.

Patients undergoing traditional surgery to have their tonsils removed usually need more than a week to recover, including one night in the hospital and the remaining time at home. In addition, they may expect intense pain and severe bleeding. Many report subsisting for days on just ice cream and jelly, as their throats are too sore to eat anything else.

By contrast, the tonsillar coblation is performed right in the doctor's office, with just a local anaesthetic or mild sedation. It is so quick that some choose to have it done on their lunch hour from work. Patients are discharged with a prescription for antibiotics, a special mouthwash, and a rinse. They can resume their normal activity immediately after the procedure, and most report suffering only mild discomfort.

Yet some skeptics warn that as with any new technology, unforeseen problems could surface farther down the road. "The procedure holds promise, but it is unclear whether the positive results will last," said Dr. Ralph Wetmore, chairman of the tonsils and adenoids subcommittee of the American Academy of Otolaryngology, and a professor at the University of Pennsylvania. "Certainly if you shrink the tonsil and it stays reduced, it would offer significantly less (of a chance of) morbidity than performing a tonsillectomy, but it's unknown what the long-term results are," Wetmore said.

Wetmore also pointed out that the tonsillar coblation may be difficult to perform on children because they would be awake. "Its benefits are probably better achieved in the adult population," he said.

21. What is the function of radiofrequency-generated heat in the procedure of tonsillar coblation?

What are the two drawbacks of traditional tonsillectomies that the tonsillar coblation does not have?

22. _____

23. _____

What are the two potential problems of the tonsillar coblation as reported in the article?

24. _____

25. _____

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Biotechnology is one of the big hopes among both politicians and stockholders. It is supposed to provide more jobs, promote more growth, assist the world's poor countries, create better harvests, and spare the Earth many pesticides in the bargain. But while genetic engineering produces new headlines almost daily, the raw material that this new science employs is slipping away. With mind-boggling speed, the plants and animals that genetic engineers depend upon are becoming extinct.

This disappearance affects all of us. It is true that no one knows exactly how many plants and animals there are on the planet. So far, 1.75 million species have been counted, and it is estimated there are far more. But before we can accurately say how many species exist, people are destroying them. As many as 130 species per day may be disappearing.

A commission of twelve professors assembled by the German government has sounded the alarm. The Scientific Council on the Global Environment has made a clear statement of its findings: The destruction of species due to human settlements and disturbance of landscapes and ecosystems has already reached such proportions that restoring a complex system of species might take millions of years if this "terrible trend" is not stopped within a few decades.

The commission points out that in its history to date, the Earth has seen five major extinctions. All of them were set off by natural catastrophes such as meteorite impacts or climate changes. The most recent of these waves of extinction occurred 65 million years ago. The present mass extinction, the sixth, is different, though, from all of its predecessors—not just in "the raging speed" at which it is proceeding but because, for the first time, it was unleashed by mankind. Homo sapiens is working toward a "total triumph" over millions of its fellow species, the 500-page document states. It may soon achieve "the most spectacular monument yet created by civilization"—an impoverished, monotonous world.

The detailed results are not yet available, but the consequences will be dramatic. In just a few more decades, the tropical rain forests could be completely destroyed through fire, logging, and man-made climate change. A similar fate may await the coral reefs, although here part of the blame will also be laid at the feet of amateur divers seeking pleasure underwater. And then there is the German tourist industry and its works in the Alps, with planned construction projects including 45 ski runs and the avalanche protective systems they will need, 22 reservoirs and hydroelectric projects, 49 highway projects, five power lines, and 18 resorts, according to the commission. Only when mankind has eaten up its natural capital, and the landscape can no longer pay dividends, will "the architects of the beautiful new Alpine world" realize what irreparable damage they have done there, the report says.

Just how thoroughly the six billion people on Earth have subjected the planet to their rule is obvious from a single statistic: Forty percent of all photosynthesis by green plants is already under human jurisdiction. The highest form of civilization apparently cannot tolerate that other plants compete with its own crops. This is not just arrogant—it is dangerous. Only a few plant species, at risk from pests and climate change, must provide food for a growing human population. In the meantime, global feedback mechanisms, which are not yet understood, are being disturbed.

Although the need for economic growth is usually cited as the reason why a loss of diversity must be seen as acceptable, economic theory itself provides no justification for it. On the contrary, even ostensibly useless or undiscovered species have potential value. The loss of Earth's biological diversity cannot be quantified. When preservation interests come into competition with development, they almost always lose—even under an environmentally friendly regime. However, now Chancellor Gerhard Schroder and his colleagues must at least allow their commission to be heard. Its conclusion is that something must be done if the Earth's biological diversity is to be preserved.

26. In your own phrasing (approximately 30 words), summarize the main argument that the author makes in this article.

27. What is the primary source of information for this article?

28. What connotations (associations) does the word "jurisdiction" generally have? How does the author use this term in the underlined sentence in the sixth paragraph?

29. What is the tone of this article?
    A. Complimentary
    B. Indifferent
    C. Critical
    D. Encouraging

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The great Nigerian novelist Chinua Achebe, one of the founders of African literature, celebrates his seventieth birthday this month. Out of his multifaceted work, the novels of his African Trilogy, written between 1958 and 1966, especially stand out. The first, Things Fall Apart, has sold almost 10 million copies worldwide and has become Africa's best-known novel.

A decisive motivation for Achebe's writing was his dissatisfaction with the colonial image of Africa presented by Europeans in such influential books as Joseph Conrad's Heart of Darkness. Edgar Wallace's "Sanders" books depicted this view of Africa with especially dismal directness. They were "books in which blacks stank, danced, screamed, lied, and begged," as one reviewer has summarized them.

Achebe rejected the racist arrogance of such depictions, as well as their tendency to make Africans vehicles for psychological, moral, or political lessons. What was missing was any genuine interest in Africans, their art, religion, or history, or an ear open to hearing their own stories.

In order to present the real Africa, Achebe needed only to recall his own childhood. His father worked for the Christian Missionary Society. In the eastern Nigerian village where the writer was born in 1930, other members of his family continued to worship Chukwu, the god of creation, and Ani, the Earth goddess. The young Achebe moved within both worlds.

Things Fall Apart, the first volume of the African Trilogy, set in the 1890s, tells about the village of Umuofia and one of its most powerful men, Okonkwo. He is the son of a weakling who was never able to attain the honorary titles of a real man. While the son does become wealthy through hard work, he is plagued by fears of failure, which express themselves through stuttering and violent outbursts. When the British colonizers and missionaries arrive in Umuofia and attempt to impose the Christian religion and a new social order, Okonkwo reacts violently and strikes one of the court officials dead during a meeting of clan members. To avoid his punishment, Okonkwo hangs himself, a violation of the clan's traditions. The old order is shattered. It cannot withstand the challenge of the new, but like the protagonist, it also fails because of its inner weaknesses.

In 1960, Achebe published No Longer at Ease, with Okonkwo's grandson Obi as the main character. With the financial support of his village, Obi had gone to study in England, and upon his return to Nigeria had managed to get a minor bureaucratic job. His clan members expected favors and reimbursement of his stipend so that other young men from the village could go to school.

But Obi went off instead to Lagos and fell into the corruption of urban life. He embezzled and then, like his grandfather, was punished by the white justice. So this wanderer between two worlds became a victim of the tribalism and corruption that continues to be responsible for many of Africa's failings.

The third novel of the trilogy, perhaps the most beautiful and best written, appeared in 1964. Arrow of God takes place in the 1920s, and Ezeulu, a priest of the Ibo religion, is the central character. Once again, the conflict is between Ibos and the English, tradition and modernity. The British colonial officials impose a policy to turn over local government to responsible local people. They choose Ezeulu because of his good reputation. However, he refuses the honor and is imprisoned.

As a result, he cannot preside over the festival of the new moon. This means that the yam harvest is not allowed to begin, and the villagers begin to starve. Some turn to the new Christian church for a faith which will allow them to eat the yams.

In this book, Achebe shows how the opposing parties in Umuaro and the hierarchical British authorities are concerned about the same values of rank and respect. Achebe presents each voice so authentically that the reader is able to understand that knowledge and authority are not "naturally" to be found on one side or another. Achebe has restored to Africans their voices. In the trilogy and his later works, he writes in an English that is permeated with the structures and rhythms of the Ibo language, thus linking his new stories to traditional myths, fables, and proverbs.

In Achebe, we hear the most powerful yet elegant voice of the second half of the twentieth century in Africa, a tireless teacher and moralist and, above all, a powerful storyteller.

30. What specifically prompted Achebe to begin writing novels?

31. In *Things Fall Apart*, what do the main character and the traditional order have in common?

32. How does Achebe present Europeans in his novels?
    A. As superior to blacks in most ways
    B. As inferior to blacks in most ways
    C. As gentle but ambitious
    D. As benevolent but interfering

33. In the novels discussed in this article, what is distinctive about Achebe's writing style?

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Read the following passage and fill in the blanks in the following summary paragraph. Write your answers for questions 34 to 40 on your answer sheet. Each answer will require **just a word or phrase**.

The Perfume Hunters

Sniffing out new smells for use in cosmetics and household products involves blood, sweat and plenty of insect repellent.

Tired, scratched and soaked in sweat, the hunters begin to think of turning back. Time is running out. Dusk is falling and they still haven't caught sight of their quarry. Suddenly they stop. One of the men lifts his head and sniffs. He knows they are close. He scans the undergrowth in the deepening gloom--and suddenly he spots what they have been looking for. There, hidden beneath some leaves at nose height is a tiny spike of flowers, the whole bunch no bigger than a thumbnail. Within minutes, the hunters have set their trap. All they have to do now is wait.

The hard work was worth it. The next morning, there in the trap is a rare catch--a new sort of smell. For the men in the Madagascan forest are perfume hunters. And instead of rifles, they are armed with nothing more sinister than a few glass jars, a couple of pumps and some tubing which they will use to capture new and exciting fragrances to make our lives smell sweeter.

Ever since the *unguentari* plied their trade in ancient Rome, perfumers have had to keep abreast of changing fashions. These days they have several thousand ingredients to choose from when creating new scents, but there is always a demand for new combinations. The bigger the "palette" of smells, the better the perfumer's chance of creating something new and fashionable. Even with everyday products such as shampoo and soap, consumers are becoming increasingly fussy. Cheap, synthetic smells are out. Fresh, natural smells are in. And many of today's fragrances have to survive tougher treatment than ever before, resisting the destructive power of bleach or a high temperature wash cycle.

Chemists can now create new smells from synthetic molecules, but nature has been in the business far longer. Plants produce countless fragrant chemicals. Many are intended to attract pollinators. Others are produced for quite different purposes. The fragrant resins that ooze from wounds in a tree, for example, defend it against infection.

The island of Madagascar is an evolutionary hot spot; 85% of its plants are unique, making it an ideal source for novel fragrances. So last October an expedition, including Robin Clery, a chemist, and Claude Dir, a perfume company director, explored two contrasting landscapes in northern Madagascar. Their first stop was a remnant of rainforest in the national park of Montaigne d'Ambre. The second was the tiny uninhabited island of Nosy Hara off the northwest coast.

With some simple technology, borrowed from the pollution monitoring industry, and a fair amount of ingenuity, the perfume hunters bagged 20 promising new aromas in the Madagascan rainforest. Each day the team set out from their "hotel"--a wooden hut lit by kerosene lamps, and trailed up and down paths and animal tracks, exploring the thick vegetation up to 10 meters on either side of the trail. Some smells came from obvious places, often big showy flowers within easy reach. Others were harder to pin down. "Often it was the very small flowers that were much more interesting," says Clery.

In fact, some of the most promising fragrances were given off by resins that oozed from the bark of trees. Resins are the source of many traditional perfumes such as frankincense and myrrh. The most exciting resin that the team found came from a *Calophyllum* tree, a relative of the Asian beauty leaf, which produces a strongly scented medicinal oil. The sap smelt rich and aromatic, but it also smelt of something the fragrance industry has had to learn to live without-*castoretum*, a substance extracted from the musk glands of beavers and once a key ingredient in many perfumes. "We don't use animal products any longer," says Dir, "so to find a tree with an animal smell is extremely precious."

After the luxuriance of the rainforest, the little-known island of Nosy Hara was a stark, dry place--geologically and biologically very different from the mainland. "Apart from two beaches, the rest of the island is impenetrable, except by hacking through the bush," says Clery. One of the biggest prizes here was a sweet-smelling sap weeping from the gnarled branches of some ancient shrubby trees in the parched interior. So far no one has been able to identify the plant.

The group also set out from the island to capture the smell of coral reefs. Odors that conjure up sunkissed seas are highly sought after by the perfume industry. "From the ocean, the only thing we have is seaweed, and that has a dark and heavy aroma. We hope to find something unique among the corals," says Dir.

The challenge for the hunters was to extract a smell from water rather than air. This was an opportunity to try Clery's new "aquaspace" apparatus--a set of filters that work underwater. On Nosy Hara, jars were fixed over knobs of coral about 2 meters down and water pumped out over the absorbent filters. So what does coral smell like? "It's a bit like lobster and crab," says Clery.

The team's task now is to recreate the best of their captured smells. First they must identify the molecules that make up each fragrance. Some ingredients may be quite common chemicals. But some may be completely novel, or they may be too complex or expensive to make in the lab. The challenge then is to conjure up the fragrances with more readily available materials. "We can avoid the need to import plants from the rainforest by creating the smell with a different set of chemicals from those in the original material," says Clery. "If we get it right, you can sniff the sample and it will transport you straight back to the moment you smelt it in the rainforest."

Summary

The perfume trade has a long history, dating back to (34)_____. Today, perfumers can choose from a wider range of chemicals, and many of these are synthetic. However, fresh, natural fragrances are more (35)_____ and perfumers continue to hunt for new smells from nature. Plants are a major source of perfumes, producing smells for many reasons, such as to encourage useful insects and to prevent (36)_____. Last October, perfume hunters traveled to Madagascar, a promising site for new smells because of the (37)_____ of its trees and flowers. In a rainforest, the group collected an extremely valuable smell which resembled a chemical called *castoretum*. This new smell was considered very useful because today perfumers have stopped employing (38)_____. At a small island, the fragrances of (39)_____ were collected by the same team using equipment that works underwater. On returning to the laboratory, the group will attempt to reproduce the new smells using chemicals that are (40)_____.