Questions 46 to 50 are based on the following passage.

The Paris climate agreement finalised in December last year heralded a new era for climate action. For the first time, the world's nations agreed to keep global warming well below 2°C.

This is vital for climate-vulnerable nations. Fewer than 4% of countries are responsible for more than half of the world's greenhouse gas emissions. In a study published in *Nature Scientific Reports* we reveal just how deep this injustice runs.

Developed nations such as Australia, the United States* Canada, and European countries are essentially climate "free-riders": causing the majority of the problems through high greenhouse gas emissions, while incurring few of the costs such as climate change's impact on food and water. In other words, a few countries are benefiting enormously from the consumption of fossil fuels, while at the same time contributing disproportionately to the global burden of climate change.

On the flip side, there are many "forced riders", who are suffering from the climate change impacts despite having scarcely contributed to the problem. Many of the world's most climate-vulnerable countries, the majority of which are African or small island states, produce a very small quantity of emissions. This is much like a non-smoker getting cancer from secondhand smoke, while the heavy smoker is fortunate enough to smoke in good health.

The Pairs agreement has been widely hailed as a positive step forward in addressing climate change for all, although the details on addressing "climate justice" can be best described as sketchy.

The goal of keeping global temperature rise "well below" 2°C is commendable but the emissions-reduction pledges submitted by countries leading up to the Pairs talks are very unlikely to deliver on this.

More than \$ 100 billion in funding has been put on the table for supporting developing nations to reduce emissions. However, the agreement specifies that there is no formal distinction between developed and developing nations in their responsibility to cut emissions, effectively ignoring historical emissions. There is also very little detail on who will provide the funds or, importantly, who is responsible for their provision. Securing these funds, and establishing who is responsible for raising them will also be vital for the future of climate- vulnerable countries.

The most climate-vulnerable countries in the world have contributed very little to creating the global disease from which they now suffer the most. There must urgently be a meaningful mobilisation of the policies outlined in the agreement if we are to achieve national emission reductions while helping the most vulnerable countries adapt to climate change.

And it is clearly up to the current generation of leaders from high-emitting nations to decide whether they want to be remembered as climate change tyrants or pioneers.

- 36. The author is critical of the Paris climate agreement because
 - A) it is unfair to those climate-vulnerable nations.
 - B) it aims to keep temperature rise below 2°C only.

- C) it is beneficial to only fewer than 4% of countries.
- D) it burdens developed countries with the sole responsibility.
- 37. Why does the author call some developed countries climate "free-riders"?
 - A) They needn't worry about the food and water they consume.
 - B) They are better able to cope with the global climate change.
 - C) They hardly pay anything for the problems they have caused.
 - D) They are free from the greenhouse effects affacting "forced riders".
- 38. Why does the author compare the "forced riders" to second-hand smokers?
 - A) They have little responsibility for public health problems.
 - B) They are vulnerable to unhealthy environmental conditions.
 - C) They have to bear consequences they are not responsible for.
 - D) They are unaware of the potential risks they are confronting.
- 39. What does the author say about the \$ 100 billion funding?
 - A) It will motivate all nations to reduce carbon emissions.
 - B) There is no final agreement on where it will come from.
 - C) There is no clarification of how the money will be spent.
 - D) It will effectively reduce greenhouse emissions worldwide.
- 40. What urgent action must be taken to realise the Paris climate agreement?
 - A) Encouraging high-emitting nations to take the initiative.
 - B) Calling on all the nations concerned to make joint efforts.
 - C) Pushing the current world leaders to come to a consensus
 - D) Putting in effect the policies in the agreement at once.

Questions 51 to 55 are based on the following passage.

Teenagers at risk of depression, anxiety and suicide often wear their troubles like a *neon* (霓虹灯) sign. Their risky behaviors — drinking too much alcohol, using illegal drugs, smoking cigarettes and skipping school — can alert parents and teachers that serious problems are brewing.

But a new study finds that there's another group of adolescents who are in nearly as much danger of experiencing the same psychiatric symptoms; teens who use tons of media, don't get enough sleep and have a *sedentary* (不爱活动的)lifestyle.

Of course, that may sound like a description of every teenager on the planet. But the study warns that it is teenagers who engage in all three of these practices in the extreme who are truly in jeopardy. Because their behaviors are not usually seen as a red flag, these young people have been dubbed the "invisible risk" group by the study's authors.

"In some ways they're at greater risk of falling through the cracks, '' says researcher Vladimir Carli. "While most parents, teachers and clinicians would react to an adolescent using drugs or getting drunk, they may easily overlook teenagers who are engaging in inconspicuous behaviors.'

The study's authors surveyed 12,395 students and analyzed nine risk behaviors, including excessive alcohol use, illegal drug use, heavy smoking, high media use and *truancy* (逃学). Their aim was to determine the relationship between these risk behaviors and mental health issues in teenagers.

About 58% of the students demonstrated none or few of the risk behaviors. Some 13% scored high on all nine of the risk behaviors. And 29%, the "invisible risk" group, scored high on three in particular: They spent five hours a day or more on electronic devices. They slept six hours a night or less. And they neglected "other healthy activities.".

The group that scored high on all nine of the risk behaviors was most likely to show symptoms of depression; in all, nearly 15% of this group reported being depressed, compared with just 4% of the low-risk group. But the invisible group wasn't far behind the high-risk set-, with more than 13% of them exhibiting depression.

The findings caught Carli off guard. "We were very surprised," he says* "The high-risk group and low-risk group are obvious. But this third group was not only unexpected, it was so distinct and so large — nearly one third of our sample — that it became a key finding of the study."

Carli says that one of the most significant things about his study is that it provides new early-warning signs for parents, teachers and mental health-care providers. And early identification, support and treatment for mental health issues, he says, are the best ways to keep them from turning into full blown disorders.

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- 41. What does the author mean by saying "Teenagers at risk of depression, anxiety and suicide often wear their troubles like a neon sign" (Lines 1-2 · Para, 1)?
 - A) Mental problems can now be found in large numbers of teenagers.
 - B) Teenagers' mental problems are getting more and more attention.
 - C) Teenagers' mental problems are often too conspicuous not to be observed.
 - D) Depression and anxiety are the most common symptoms of mental problems.
- 42. What is the finding of the new study?
 - A) Teenagers' lifestyles have changed greatly in recent years.
 - B) Many teenagers resort to drugs or alcohol for mental relief.
 - C) Teenagers experiencing psychological problems tend to use a lot of media.
 - D) Many hitherto unobserved youngsters may have psychological problems.

- 43. Why do the researchers refer to teens who use tons of media, don't get enough sleep and have a sedentary lifestyle as the "invisible risk" group?
 - A) Their behaviors can be an invisible threat to society.
 - B) Their behaviors do not constitute a warning signal.
 - C) Their behaviors do not tend towards mental problems.
 - D) Their behaviors can be found in almost all teenagers on earth.
- 44. What does the new study find about the invisible group?
 - A) They are almost as liable to depression as the high-risk group.
 - B) They suffer from depression without showing any symptoms.
 - C) They do not often demonstrate risky behaviors as their peers.
 - D) They do not attract the media attention the high-risk group does.
- 45. What is the significance of Vladimir Carli's study?
 - A) It offers a new treatment for psychological problems among teenagers.
 - B) It provides new early-warning signals for identifying teens in trouble.
 - C) It may have found an ideal way to handle teenagers with behavioral problems.
 - D) It sheds new light on how unhealthy behaviors trigger mental health problems.

Questions 46 to 50 are based on the following passage.

Any veteran nicotine addict will testify that fancy packaging plays no role in the decision to keep smoking. So* it is argued, stripping cartons of their branding will trigger no mass movement to quit.

But that isn't why the government — under pressure from cancer charities, health workers and the Labour party — has agreed to legislate for standardised packaging. The theory is that smoking should be stripped of any appeal to discourage new generations from starting in the first place. Plain packaging would be another step in the reclassification of cigarettes from inviting consumer products to narcotics (麻醉剂).

Naturally, the tobacco industry is violently opposed. No business likes to admit that it sells addictive poison as a lifestyle choice. That is why government has historically intervened, banning advertising, imposing health warnings and *punitive* (惩罚性的) duties. This approach has led over time to a fall in smoking with numbers having roughly halved since the 1970s.

Evidence from Australia suggests plain packaging pushes society further along that road. Since tobacco is one of the biggest causes of premature death in the UK, a measure that tames the habit even by a fraction is worth trying.

So why has it taken so long? The Department of Health declared its intention to consider the move in November 2010 and consulted through 2012. But the plan was suspended in July 2013. It did not escape notice that a lobbying firm set up by Lynton Crosby, David Cameron's election campaign director, had previously acted for Philip Morris International. (The prime minister denied there was a connection between his new adviser's outside interests and the change in legislative programme.) In November 2013, after an unnecessary round of additional consultation, health minister Jane Ellison said the government was minded to proceed after all. Now we are told Members of Parliament (MPs) will have a free vote before parliament is dissolved in March.

Parliament has in fact already authorised the government to tame the tobacco trade. MPs voted overwhelmingly in favour of Labour amendments to the children and families bill last February that included the power to regulate for plain packaging. With sufficient will in Downing Street this would have been done already. But strength of will is the missing ingredient where Mr. Cameron and public health are concerned. His attitude to state intervention has looked confused ever since his bizarre 2006 lament (以 惜) that chocolate oranges placed seductively at supermarket check-outs fueled obesity.

The government has moved reluctantly into a sensible public health policy, but with such obvious over-cautiousness that any political credit due belongs to the opposition. Without sustained external pressure it seems certain Mr. Cameron would still be hooked on the interests of big tobacco companies.

- 36. What do chain smokers think of cigarette packaging?
 - A) Fancy packaging can help to engage new smokers.
 - B) It has little to do with the quality or taste of cigarettes.
 - C) Plain packaging discourages non-smokers from taking up smoking.
 - D) It has little impact on their decision whether or not to quit smoking.
- 37. What has the UK government agreed to do concerning tobacco packaging?
 - A) Pass a law to standardise cigarette packaging.
 - B) Rid cigarette cartons of all advertisements.
 - C) Subsidise companies to adopt plain packaging.
 - D) Reclassify cigarettes according to packaging.
- 38. What has happened in Australia where plain packaging is implemented?
 - A) Premature death rates resulting from smoking have declined.
 - B) The number of smokers has dropped more sharply than in the UK.
 - C) The sales of tobacco substitutes have increased considerably.
 - D) Cigarette sales have been falling far more quickly than in the UK.
- 39. Why has it taken so long for the UK government to consider plain packaging?

- A) Prime Minister Cameron has been reluctant to take action.
- B) There is strong opposition from veteran nicotine addicts.

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- C) Many Members of Parliament are addicted to smoking.
- D) Pressure from tobacco manufacturers remains strong.
- 40. What did Cameron say about chocolate oranges at supermarket checkouts?
 - A) They fueled a lot of controversy.
- C) They made more British people obese.
- B) They attracted a lot of smokers.
- D) They had certain ingredients missing.

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Questions 51 to 55 arc based on the following passage.

What a waste of money! In return for an average of £44,000 of debt, students get ah average of only 14 hours of lecture and tutorial time a week in Britain. Annual fees have risen from£1,000 to £9,000 in the last decade, but contact time at university has barely risen at all. And graduating doesn't even provide any guarantee of a decent job; six in ten graduates today are in non-graduate jobs.

No wonder it has become fashionable to denounce many universities as little more than elaborate con-tricks (3 商). There's a lot for students to complain about; the repayment threshold for paying back loans will be frozen for five years, meaning that lower-paid graduates have to start repaying their loans; and maintenance grants have been replaced by loans, meaning that students from poorer backgrounds face higher debt than those with wealthier parents.

Yet it still pays to go to university. If going to university doesn't work out, students pay very little — if any - of their tuition fees back; you only start repaying when you are earning £21,000 a year. Almost half of graduates — those who go on to earn less — will have a portion of their debt written off. It's not just the lectures and tutorials that are important. Education is the sum of what students teach each other in between lectures and seminars. Students do not merely benefit while at university; studies show they go on to be healthier and happier than non-graduates, and also far more likely to vote.

Whatever your talents, it is extraordinarily difficult to get a leading job in most fields without having been to university. Recruiters circle elite universities like *vultures* (\mathcal{T} **\overline{B}**). Many top firms will not even look at applications from those who lack a $2.1 \cdot i.e_{-}$, an upper-second class degree, from an elite university. Students at university also meet those likely to be in leading jobs in the future, forming contacts for life. This might not be right, but school-leavers who fail to acknowledge as much risk making the wrong decision about going to university.

Perhaps the reason why so many universities offer their students so little is they know studying at a top university remains a brilliant investment even if you don't learn anything. Studying at university will only become less attractive if employers shift their focus aWay from where someone went to university — and there is no sign of that happening anytime soon. School-leavers may moan, but they have little choice but to embrace university and the student

Questions 46 to 50 are based on the following passage.

Dr. Donald Sadoway at MIT started his own battery company with the hope of changing the world's energy future. It's a dramatic endorsement for a technology most people think about only when their smartphone goes dark. But Sadoway isn't alone in trumpeting energy storage as a missing link to a cleaner, more efficient, and more equitable energy future.

Scientists and engineers have long believed in the promise of batteries to change the world. Advanced batteries are moving out of specialized markets and creeping into the mainstream, signaling a tipping point for forward-looking technologies such as electric cars and rooftop solar panels.

The *ubiquitous* (无所不在的) battery has already come a long way, of course. For belter or worse, batteries make possible our mobile-first lifestyles, our screen culture, our increasingly globalized world. Still, as impressive as all this is, it may be trivial compared with what comes next. Having already enabled a communications revolution, the battery is now poised to transform just about everything else.

The wireless age is expanding to include not just our phones, tablets, and laptops, but also our cars, homes, and even whole communities. In emerging economies, rural communities are bypassing the wires and wooden poles that spread power. Instead, some in Africa and Asia are seeing their first lightbulbs illuminated by the power of sunlight stored in batteries.

Today, energy storage is a \$ 33 billion global industry that generates nearly 100 gigawatt-

hours of electricity per year. By the end of the decade, it's expected to be worth over \$50 billion and generate 160 gigawatt-hours, enough to attract the attention of major companies that might not otherwise be interested in a decidedly pedestrian technology. Even utility companies, which have long viewed batteries and alternative forms of energy as a threat, are learning to embrace the technologies as enabling rather than disrupting.

Today's battery breakthroughs come as the world looks to expand modern energy access to the billion or so people without it, while also cutting back on fuels that warm the planet. Those simultaneous challenges appear less overwhelming with increasingly better answers to a centuries-old question: how to make power portable.

To be sure, the battery still has a long way to go before the nightly recharge completely replaces the weekly trip to the gas station. A battery-powered world comes with its own risks, too. What happens to the centralized electric grid, which took decades and billions of dollars to build, as more and more people become "prosumers," who produce and consume their own energy onsite?

No one knows which — if any — battery technology will ultimately dominate, but one thing remains dear. The future of energy is in how we store it.

- 36. What does Dr. Sadoway think of energy storage?
 - A) It involves the application of sophisticated technology.
 - B) It is the direction energy development should follow.
 - C) It will prove to be a profitable business.
 - D) It is a technology benefiting everyone.
- 37. What is most likely to happen when advanced batteries become widely used?
 - A) Mobile-first lifestyles will become popular.
 - B) The globalization process will be accelerated.
 - C) Communications will take more diverse forms.
 - D) The world will undergo revolutionary changes.

38.	. In some rural communities of emerging economies, people have begun to					
	A)	find digital devices simply indispensable.				
	B)	communicate primarily by mobile phone.				

- C) light their homes with stored solar energy.
- D) distribute power with wires and wooden poles.

39.	Utility co	mpanies l	nave begun	to realize	that battery	technologies_	·
J	A) benefit	their bus	iness.		C) promote	innovation.	
			_				

B) transmit power faster. D) encourage competition.

- 40. What does the author imply about the centralized electric grid?
 - A) It might become a thing of the past.
 - B) It might turn out to be a "prosumer".
 - C) It will be easier to operate and maintain.
 - D) It will have to be completely transformed.

Questions 51 to 55 are based on the following passage.

More than 100 years ago, American sociologist W. E. B. Du Bois was concerned that race was being used as a biological explanation for what he understood to be social and cultural differences between different populations of people. He spoke out against the idea of "white" and "black" as distinct groups, claiming that these distinctions ignored the scope of human diversity.

Science would favor Du Bois. Today, the mainstream belief among scientists is that race is a social construct without biological meaning. In an article published in the journal *Science* four scholars say racial categories need to be phased out.

14Essentially, I could not agree more with the authors," said Svante Paabo, a biologist and director of the Max Planck Institute for Evolutionary Anthropology in Germany. In one example that demonstrated genetic differences were not fixed along racial lines, the full *genomes* (基因组) of James Watson and Craig Venter, two famous American scientists of European ancestry, were compared to that of a Korean scientist, Seong-Jin Kim. It turned out that Watson and Venter shared fewer variations in their genetic sequences than they each shared with Kim.

Michael Yudell, a professor of public health at Drexel University in Philadelphia, said that modern genetics research is operating in a paradox: on the one hand, race is understood to be a useful tool to illuminate human genetic diversity, but on the other hand, race is also understood to be a poorly defined marker of that diversity.

Assumptions about genetic differences between people of different races could be particularly dangerous in a medical setting. "If you make clinical predictions based on somebody's race, you're going to be wrong a good chunk of the time," Yudell told *Live Science*. In the paper, he and his colleagues used the example of cystic fibrosis, which is underdiagnosed in people of African ancestry because it is thought of as a "white" disease.

So what other variables could be used if the racial concept is thrown out? Yudell said scientists need to get more specific with their language, perhaps using terms like "ancestry" or "population" that might more precisely reflect the relationship between humans and their genes, on both the individual and population level. The researchers also acknowledged that there are a few areas where race as a

construct might still be useful in scientific research: as a political and social, but not biological, variable.

"While we argue phasing out racial *terminology* (术语) in the biological sciences) we also acknowledge that using race as a political or social category to study racism, although filled with lots of challenges, remains necessary given our need to understand how structural inequities and discrimination produce health *disparities* (差异) between groups." Yudell said.

- 41. Du Bo is was opposed to the use of race as_____.
 - A) a basis for explaining human genetic diversity.
 - B) an aid to understanding different populations.
 - C) an explanation for social and cultural differences.
 - D) a term to describe individual human characteristics.
- 42. The study by Svante Paabo served as an example to show.
 - A) modern genetics research is likely to fuel racial conflicts.
 - B) race is a poorly defined marker of human genetic diversity.
 - C) race as a biological term can explain human genetic diversity.
 - D) genetics research should consider social and cultural variables.
- 43. The example of the disease cystic fibrosis underdiagnosed in people of African ancestry

demonstrates that ...

- A) it is absolutely necessary to put race aside in making diagnosis.
- B) it is important to include social variables in genetics research.
- C) racial categories for genetic diversity could lead to wrong clinical predictions.
- D) discrimination against black people may cause negligence in clinical treatment.
- 44. What is Yudell's suggestion to scientists?
 - A) They be more precise with the language they use.
 - B) They refrain from using politically sensitive terms.
 - C) They throw out irrelevant concepts in their research.
 - D) They examine all possible variables in their research.
- 45. What can be inferred from Yudell's remark in the last paragraph?
 - A) Clinging to racism prolongs inequity and discrimination.
 - B) Physiological disparities are quite striking among races.
 - C) Doing away with racial discrimination is challenging.
 - D) Racial terms are still useful in certain fields of study.

Questions 46 to 50 are based on the following passage.

Professor Stephen Hawking has warned that the creation of powerful artifcial intelligence (AI) will be "either the best, or the worst thing, ever to happen to humanity", and praised the creation of an academic institute dedicated to researching the future of intelligence as "crucial to the future of our civilisation and our species".

Hawking was speaking at the opening of the Leverhulme Centre for the Future of Intelligence(LCFI) at Cambridge University, a multi-disciplinary institute that will attempt to tackle some of the open-ended questions raised by the rapid pace of development in AI research. "We spend a great deal of time studying history," Hawking said, "which, let's face it, is mostly the history of stupidity. So it's a welcome change that people are studying instead the future of intelligence."

While the world-renowned physicist has often been cautious about AI, raising concerns that humanity could be the architect of its own destruction if it creates a super-intelligence with a will of its own, he was also quick to highlight the positives that AI research can bring. "The potential benefits of creating intelligence are huge," he said. "We cannot predict what we might achieve when our own minds are amplified by AI. Perhaps with the tools of this new technological revolution, we will be able to undo some of the damage done to the natural world by the last one—industrialisation. And surely we will aim to finally eradicate disease and poverty. And every aspect of our lives will be transformed. In short, success in creating AI could be the biggest event in the history of our civilisation."

Huw Price, the centre's academic director and the Bertrand Russell professor of philosophy at Cambridge University, where Hawking is also an academic, said that the centre came about partially as a result of the university's Centre for Existential Risk. That institute examined a wider range of potential problems for humanity, while the LCFI has a narrow focus.

AI pioneer Margaret Boden, professor of cognitive science at the University of Sussex, praised the progress of such discussions. As recently as 2009, she said, the topic wasn't taken seriously, even among AI researchers. "AI is hugely exciting," she said, "but it has limitations, which present grave dangers given uncritical use."

The academic community is not alone in warning about the potential dangers of AI as well as the potential benefits. A number of pioneers from the technology industry, most famously the entrepreneur Elon Musk, have also expressed their concerns about the damage that a super-intelligent AI could do to humanity.

- 46. What did Stephen Hawking think of artificial intelligence?
 - A) It would be vital to the progress of human civilisation.
 - B) It might be a blessing or a disaster in the making.
 - C) It might present challenges as well as opportunities.
 - D) It would be a significant expansion of human intelligence.
- 47. What did Hawking say about the creation of the LCFI?
 - A) It would accelerate the progress of AI research.
 - B) It would mark a step forward in the AI industry.
 - C) It was extremely important to the destiny of humankind.

- D) It was an achievement of multi-disciplinary collaboration.
- 48. What did Hawking say was a welcome change in AI research?
 - A) The shift of research focus from the past to the future.
 - B) The shift of research from theory to implementation.
 - C) The greater emphasis on the negative impact of AI.
 - D) The increasing awareness of mankind's past stupidity.
- 49. What concerns did Hawking raise about AI?
 - A) It may exceed human intelligence sooner or later.
 - B) It may ultimately over-amplify the human mind.
 - C) Super-intelligence may cause its own destruction.
 - D) Super-intelligence may eventually ruin mankind.
- 50. What do we learn about some entrepreneurs from the technology industry?
 - A) They are much influenced by the academic community.
 - B) They are most likely to benefit from AI development.
 - C) They share the same concerns about AI as academics.
 - D) They believe they can keep AI under human control.

Questions 51 to 55 are based on the following passage.

The market for products designed specifically for older adults could reach \$30 billion by next year, and *startups* (初创公司) want in on the action. What they sometimes lack is feedback from the people who they hope will use their products. So Brookdale, the country's largest owner of retirement communities, has been inviting a few select entrepreneurs just to move in for a few days, show off their products and hear what the residents have to say.

That's what brought Dayle Rodriguez, 28, all the way from England to the dining room of Brookdale South Bay in Torrance, California. Rodriguez is the community and marketing manager for a company called Sentab. The startup's product, SentabTV, enables older adults who may not be comfortable with computers to access email, video chat and social media using just their televisions and a remote control.

"It's nothing new, it's nothing too complicated and it's natural because lots of people have TV remotes," says Rodriguez.

But none of that is the topic of conversation in the Brookdale dining room. Instead, Rodriguez solicits residents' advice on what he should get on his cheeseburger and how he should spend the afternoon. Playing cards was on the agenda, as well as learning to play *mahjong* (麻将).

Rodriguez says it's important that residents here don't feel like he's selling them something. "I've had more feedback in a passive approach,"he says. "Playing pool, playing cards, having dinner, having lunch,"all work better "than going through a survey of questions. When they get to know me and to trust me, knowing for sure I'm not selling them something—there'll be more honest feedback from them."

Rodriguez is just the seventh entrepreneur to move into one of Brookdale's 1,100 senior living communities. Other new products in the program have included a kind of full-body blow dryer and specially designed clothing that allows people with

disabilities to dress and undress themselves.

Mary Lou Busch, 93, agreed to try the Sentab system. She tells Rodriguez that it might be good for someone, but not for her.

"I have the computer and FaceTime, which I talk with my family on,"she explains. She also has an iPad and a smartphone. "So I do pretty much everything I need to do."

To be fair, if Rodriguez had wanted feedback from some more *technophobic* (害怕技术的) seniors, he might have ended up in the wrong Brookdale community. This one is located in the heart of Southern California's aerospace corridor. Many residents have backgrounds in engineering, business and academic circles.

But Rodriguez says he's still learning something important by moving into this Brookdale community: "People are more tech-proficient than we thought."

And besides, where else would he learn to play mahjong?

- 51. What does the passage say about the startups?
 - A) They never lose time in upgrading products for seniors.
 - B) They want to have a share of the seniors' goods market.
 - C) They invite seniors to their companies to try their products.
 - D) They try to profit from promoting digital products to seniors.
- 52. Some entrepreneurs have been invited to Brookdale to_____.
 - A) have an interview with potential customers
 - B) conduct a survey of retirement communities
 - C) collect residents' feedback on their products
 - D) show senior residents how to use IT products
- 53. What do we know about SentabTV?
 - A) It is a TV program catering to the interest of the elderly.
 - B) It is a digital TV which enjoys popularity among seniors.
 - C) It is a TV specially designed for seniors to view programs.
 - D) It is a communication system via TV instead of a computer.
- 54. What does Rodriguez say is important in promoting products?
 - A) Winning trust from prospective customers.
 - B) Knowing the likes and dislikes of customers.
 - C) Demonstrating their superiority on the spot.
 - D) Responding promptly to customer feedback.
- 55. What do we learn about the seniors in the Brookdale community?
 - A) Most of them are interested in using the Sentab.
 - B) They are quite at ease with high-tech products.
 - C) They have much in common with seniors elsewhere.
 - D) Most of them enjoy a longer life than average people.

Effective Friday, Screen Actors Guild-American Federation of Television and Radio Artists (SAG-AFTRA) has declared a strike against 11 video game publishers over games that went into production after Feb. 17, 2015. The companies include some of the heavyweights of the industry, like Electronic Arts Productions, Insomniac Games, Activision and Disney.

The strike comes in light of an unsuccessful 19 months of negotiations after the existing labor contract known as the Interactive Media Agreement expired in late 2014. overall, the strike is an effort to provide more secondary compensation along with other concerns, such as transparency upon hiring talent and *on-set* (制作中) safety precautions.

The video gaming industry has ballooned in recent years. The *Los Angeles Times* reports that the industry is in the midst of an intense increase in cash flow. In 2015, gaming produced \$23.5 billion in domestic revenue.

But SAG-AFTRA says voice actors don't receive *residuals* (追加酬金) for their gaming work. Instead, they receive a fixed rate, which is typically about \$825 for a standard four-hour vocal session. So the voice actors are pushing for the idea of secondary compensation—a performance bonus every time a game sells 2 million copies or downloads, or reaches 2 million subscribers, with a cap at 8 million.

"It's a very small number of games that would trigger this secondary compensation issue," said voice actor Crispin Freeman, who's a member of the union's negotiating committee. "This is an important aspect of what it means to be a *freelance* (从事自由职业的) performer, who isn't regularly employed every single day working on projects."

Another major complaint from the actors is the secrecy of the industry. "I can't imagine if there's any other acting job in the world where you don't know what show you're in, when you're hired,"says voice actor Keythe Farley, who chairs the SAG-AFTRA negotiating committee.

"And yet that happens every day in the video game world," Farley told reporters during a press conference Friday. "I was a main character in Fallout 4, a character by the name of Kellogg, and I never knew that I was doing vocal recording for that game throughout the year and a half."

Scott Witlin, the lawyer representing the video game companies, says voice actors "represent less than one tenth of 1 percent of the work that goes into making a video game." So "even though they're the top craftsmen in their field,"Witlin says, "if we pay them under a vastly different system than the people who do the 99.9 percent of the work, that's going to create far more problems for the video game companies." 46. Why did SAG-AFTRA declare a strike against some video game publishers?

- A) The labor contract between them had been violated.
- B) Its appeal to renegotiate the contract had been rejected.
- C) It had been cheated repeatedly in the 19 months of talks.
- D) The negotiations between them had broken down.
- 47. What do we learn from the passage about the video gaming industry?
 - A) It has reaped huge profits in recent years.

- B) It has become more open and transparent.
- C) It has attracted many famous voice actors.
- D) It has invested a lot in its domestic market.
- 48. What are the voice actors demanding?
 - A) More regular employment.
 - B) A non-discriminatory contract.
 - C) Extra pay based on sales revenues.
 - D) A limit on the maximum work hours.
- 49. What does Keythe Farley say about voice actors?
 - A) They are kept in the dark about many details of their job.
 - B) They are discriminated against in the gaming industry.
 - C) They are not paid on a regular basis.
 - D) They are not employed full-time.
- 50. What is the argument of lawyer Scott Witlin?
 - A) Voice actors should have a pay raise if they prove to be top craftsmen.
 - B) Changing the pay system would cause the industry more problems.
 - C) Voice actors are mere craftsmen, not professional performers.
 - D) Paying voice actors on an hourly basis is in line with the law.

Officials at the White House announced a new space policy focused on managing the increasing number of satellites that companies and governments are launching into space. Space Policy Directive-3 lays out general guidelines for the United States to *mitigate* (缓解) the effects of space debris and track and manage traffic in space.

This policy sets the stage for the Department of Commerce to take over the management of traffic in space. The department will make sure that newly launched satellites don't use radio frequencies that would interfere with existing satellites, and schedule when such new satellites can be launched. This only applies to American space activities, but the hope is that it will help standardize a set of norms in the dawning commercial spaceflight industry throughout the world.

Space, especially the space directly around our planet, is getting more crowded as more governments and companies launch satellites. One impetus for the policy is that companies are already starting to build massive *constellations* (星座), comprising hundreds or thousands of satellites with many moving parts among them. With so much stuff in space, and a limited area around our planet, the government wants to reduce the chances of a collision. Two or more satellites slamming into each other could create many more out-of-control bits that would pose even more hazards to the growing collection of satellites in space.

And it's not like this hasn't happened before. In 2009 an old Russian craft slammed into a communications satellite, creating a cloud of hundreds of pieces of debris and putting other hardware at risk. Journalist Sarah Scoles reports that NASA currently tracks about 24,000 objects in space, and in 2016 the Air Force had to issue 3,995,874 warnings to satellite owners alerting them to a potential nearby threat from

another satellite or bit of debris.

That's why this new policy also includes directions to update the current U.S. Government Orbital Debris Mitigation Standard Practices, which already require any entity that launches a satellite or spacecraft to vigorously analyze the likelihood that any of their actions, from an unexpected failure or normal operations, will create more space debris. It includes accounting for any piece of debris they plan to release over 5mm that might stay in orbit for 25 years or more. It might seem surprising to think about an item staying in space for that long, but the oldest satellite still in orbit—Vanguard 1—turned 60 in 2018.

Agencies and companies throughout the world are working on developing technology that would dispose of or capture space debris before it causes serious damage. But for now, the U.S. government is more focused on preventing new debris from forming than taking the trash out of orbit.

- 51. What is the purpose of the new U.S. space policy?
 - A) To lay out general guidelines for space exploration.
 - B) To encourage companies to join in space programs.
 - C) To make the best use of satellites in space.
 - D) To improve traffic conditions in space.
- 52. What is the Department of Commerce expected to do under the new policy?
 - A) Reduce debris in space.
 - B) Monitor satellite operations.
 - C) Regulate the launching of new satellites.
 - D) Update satellite communications technology.
- 53. What does the U.S. government hope to do with the new space policy?
 - A) Set international standards for the space flight industry.
 - B) Monopolize space industry by developing a set of norms.
 - C) Facilitate commercial space flights throughout the world.
 - D) Promote international collaboration in space exploration.
- 54. What is a space vehicle launching entity required to do according to the current U.S. Government Orbital Debris Mitigation Standard Practices?
 - A) Give an estimate of how long its debris will stay in space.
 - B) Account for the debris it has released into space at any time.
 - C) Provide a detailed plan for managing the space debris it creates.
 - D) Make a thorough analysis of any possible addition to space debris.
- 55. What are space agencies and companies aiming to do at present?
 - A) Recycle used space vehicles before they turn into debris.
 - B) Develop technology to address the space debris problem.
 - C) Limit the amount of debris entering space.
 - D) Cooperate closely to retrieve space debris.

11

When I re-entered the full-time workforce a few years ago after a decade of solitary self-employment, there was one thing I was looking forward to the most: the opportunity to have work friends once again. It wasn't until I entered the corporate world that I realized, for me at least, being friends with colleagues didn't emerge as a

priority at all. This is surprising when you consider the prevailing emphasis by scholars and trainers and managers on the importance of cultivating close interpersonal relationships at work. So much research has explored the way in which *collegial* (同事的) ties can help overcome a range of workplace issues affecting productivity and the quality of work output such as team-based conflict, jealousy, undermining, anger, and more.

Perhaps my expectations of lunches, water-cooler gossip and caring, deep-and-meaningful conversations were a legacy of the last time I was in that kind of office environment. Whereas now, as I near the end of my fourth decade, I realize work can be fully functional and entirely fulfilling without needing to be best mates with the people sitting next to you.

In an academic analysis just published in the profoundly-respected Journal of *Management*, researchers have looked at the concept of "indifferent relationships". It's a simple term that *encapsulates* (概括) the fact that relationships at work can reasonably be non-intimate, inconsequential, unimportant and even, dare I say it, disposable or substitutable.

Indifferent relationships are neither positive nor negative. The limited research conducted thus far indicates they're especially dominant among those who value independence over cooperation, and harmony over confrontation. Indifference is also the preferred option among those who are socially lazy. Maintaining relationships over the long term takes effort. For some of us, too much effort.

As noted above, indifferent relationships may not always be the most helpful approach in resolving some of the issues that pop up at work. But there are nonetheless several empirically proven benefits. One of those is efficiency. Less time chatting and socializing means more time working and *churning* ().

The other is self-esteem. As human beings, we're primed to compare ourselves to each other in what is an anxiety-inducing phenomenon. Apparently, we look down on acquaintances more so than friends. Since the former is most common among those inclined towards indifferent relationships, their predominance can bolster individuals' sense of self-worth.

Ego aside, a third advantage is that the emotional neutrality of indifferent relationships has been found to enhance critical evaluation, to strengthen one's focus on task resolution, and to gain greater access to valuable information. None of that might be as fun as after-work socializing but, hey, I'll take it anyway.

- 46. What did the author realize when he re-entered the corporate world?
 - A) Making new friends with his workmates was not as easy as he had anticipated.
- B) Cultivating positive interpersonal relationships helped him expel solitary feelings.
- C) Working in the corporate world requires more interpersonal skills than self-employment.
- D) Building close relationships with his colleagues was not as important as he had expected.
- 47. What do we learn from many studies about collegial relationships?
 - A) Inharmonious relationships have an adverse effect on productivity.

- B) Harmonious relationships are what many companies aim to cultivate.
- C) Close collegial relationships contribute very little to product quality.
- D) Conflicting relationships in the workplace exist almost everywhere.
- 48. What can be inferred about relationships at work from an academic analysis?
 - A) They should be cultivated.
 - B) They are virtually irrelevant.
 - C) They are vital to corporate culture.
 - D) They should be reasonably intimate.
- 49. What does the author say about people who are socially lazy?
 - A) They feel uncomfortable when engaging in social interactions.
 - B) They often find themselves in confrontation with their colleagues.
 - C) They are unwilling to make efforts to maintain Workplace relationships.
 - D) They lack basic communication skills in dealing with interpersonal issues.
- 50. What is one of the benefits of indifferent relationships?
 - A) They provide fun at work.
 - B) They help control emotions.
 - C) They help resolve differences.
 - D) They improve work efficiency.

In a few decades, artificial intelligence (AI) will surpass many of the abilities that we believe make us special. This is a grand challenge for our age and it may require an "irrational" response.

One of the most significant pieces of news from the US in early 2017 was the efforts of Google to make autonomous driving a reality. According to a report, Google's self-driving cars clocked 1,023,330 km, and required human intervention 124 times. That is one intervention about every 8,047 km of autonomous driving. But even more impressive is the progress in just a single year: human interventions fell from 0.8 times per thousand miles to 0.2, a 400% improvement. With such progress, Google's cars will easily surpass my own driving ability later this year.

Driving once seemed to be a very human skill. But we said that about chess, too. Then a computer beat the human world champion, repeatedly. The board game *Go* (围棋) took over from chess as a new test for human thinking in 2016, when a computer beat one of the world's leading professional Go players. With computers conquering what used to be deeply human tasks, what will it mean in the future to be human? I worry about my six-year-old son. What will his place be in a world where machines beat us in one area after another? He'll never calculate faster, never drive better, or even fly more safely. Actually, it all comes down to a fairly simple question: What's so special about us? It can't be skills like arithmetic, which machines already excel in. So far, machines have a pretty hard time emulating creativity, arbitrary enough not to be predicted by a computer, and yet more than simple randomness.

Perhaps, if we continue to improve information-processing machines, we'll soon have helpful rational assistants. So we must aim to complement the rationality of the

machine, rather than to compete with it. If I'm right, we should foster a creative spirit because a dose of illogical creativity will complement the rationality of the machine. Unfortunately, however, our education system has not caught up to the approaching reality. Indeed, our schools and universities are structured to mould pupils to be mostly obedient servants of rationality, and to develop outdated skills in interacting with outdated machines. We need to help our children learn how to best work with smart computers to improve human decision-making. But most of all we need to keep the long-term perspective in mind: that even if computers will outsmart us, we can still be the most creative. Because if we aren't, we won't be providing much value in future ecosystems, and that may put in question the foundation for our existence.

- 51. What is the author's greatest concern about the use of AI?
 - A) Computers are performing lots of creative tasks.
 - B) Many abilities will cease to be unique to human beings.
 - C) Computers may become more rational than humans.
 - D) Many human skills are fast becoming outdated.
- 52. What impresses the author most in the field of AI?
 - A) Google's experimental driverless cars require little human intervention.
 - B) Google's cars have surpassed his driving ability in just a single year.
 - C) Google has made huge progress in autonomous driving in a short time.
 - D) Google has become a world leader in the field of autonomous driving.
- 53. What do we learn from the passage about creativity?
 - A) It is rational.
 - B) It is predictable.
 - C) It is human specific.
 - D) It is yet to be emulated by AI.
- 54. What should schools help children do in the era of AI?
 - A) Cultivate original thinking.
 - B) Learn to work independently.
 - C) Compete with smart machines.
 - D) Understand how AI works.
- 55. How can we humans justify our future existence?
 - A) By constantly outsmarting computers.
 - B) By adopting a long-term perspective.
 - C) By rationally compromising with AI.
 - D) By providing value with our creativity.

1 ACCBD 2 CDBAB 3 DABAC 4 ADCBD 5 BDCAA 6 CBCAD

7 BCADC 8BCDAB 9DACAB 10 DCADB 11DABCD 12BCDAD