1 Read the passage below and then answer the questions 1~7 about it. Boxes (☐) in the passage indicate missing information. Choose the most appropriate answers based on what is stated or implied in the passage.

For many years, human health was defined as the absence of ☐1☐ (Figure 1). As long as a person had no ☐2☐ symptoms of a disease, that person was considered to be in ☐3☐ health. Although such a person may have had blocked arteries* from a lifetime of fatty hamburgers and snack foods, it wasn't until symptoms of heart disease such as chest pain became <1> apparent that the patient was considered unhealthy.

Figure 1: The Old Concept

Poor health	Good health
Obvious disease or illness	No obvious disease or illness

Today, health experts rely on a comprehensive definition of health. It takes into account both physical and emotional well-being. Physical health refers to the state of the body—how well it is working. Physical health can be measured by checking <2> temperature, blood pressure, blood sugar levels, and a number of other variables. Abnormalities in these measurements may be a signal that one's physical health is in danger, < ☐6☐ >. Medical scientists use the term risk factor to refer to abnormal conditions such as high blood pressure or high blood cholesterol levels that put a person at risk for disease. The presence of one or more risk factors is a sign of less-than-perfect health. Obviously, the more risk factors there are, < ☐7☐ > (Figure 2).

As shown in Figure 2, the absence of risk factors indicates the best health. Having a few risk factors indicates that < ☐8☐ >—just good. More risk factors indicates that your health is poor. Even in poor health, you may not exhibit any concerning symptoms—at least not yet. For example, a friend of mine who exhibited no signs of heart disease at age 50 put her children to bed, went downstairs to the sofa, then suffered a fatal heart attack. Under the new and more realistic concept of health, then, even though you may feel okay and not exhibit obvious signs of disease, such as a failing heart, the presence of multiple risk factors indicates that < ☐9☐ >.

Figure 2: The New Concept

Poorest health	Poor health	Good health	Best health
Obvious disease or illness Many risk factors Poor fitness Poor mental health	More risk factors	A few risk factors	No obvious disease or illness No risk factors Good fitness Good mental health

Scientists also use the term risk factor to refer to activities that make an individual more likely to develop diseases. Smoking, lack of exercise, and a fatty diet, for example, are risk factors for heart disease. ☐10☐ this, many people today lack exercise and eat poorly, putting them at risk for a wide variety of diseases, including heart attack and diabetes*.

Physical health is also measured by one's level of physical fitness. If you can't walk up a set of stairs without being out of breath, you're not considered very physically fit. You're also more likely to have other problems later in life—for example, heart disease. Emotional wellness also factors into an assessment of a person's health. Especially related to this is your ability to cope with stress. As a risk factor, an inability to cope may gradually lead to physical problems, such as high blood pressure and heart disease.

Mental and physical fitness are measures of our abilities to ☐11☐ the demands of life. Fit people are able to cope with daily psychological stresses and are able to move about without becoming short of breath. They're also better employees, as <3> they are less likely to take days off because of illness. For that and other reasons, some companies are now paying employees to adopt healthier lifestyles. IBM*, for instance, offers financial incentives to employees who exercise, lose weight, and stop smoking. Some employees receive an extra $600 a year in incentives for pursuing a path to a healthier life. Why would a company do this?

IBM estimates that for every dollar it spends on promoting wellness, it saves $3 in health care costs. In addition, employees require much less sick time, which increases productivity. Currently, more than half of IBM's employees have signed up for its wellness program. Maintaining good health is a lifelong job that is best begun early in life, but it is never too late to steer onto a healthy path. There are numerous healthy habits that you can add to your lifestyle to increase your chances of living a long, healthy life. When making these changes, you may want to start slowly, ☐12☐ one new healthy habit after another.

<<NOTES*>>
arteries = 動脈
diabetes = 糖尿病
IBM = 大手のコンピュータ関連企業名

1. ☐1☐ ~ ☐3☐ Use the words in Figure 1 to choose the most appropriate answers.

① old ② concept ③ poor ④ health ⑤ good ⑥ obvious ⑦ disease

2. Which is the most stressed syllable in each word?

☐4☐ <1> apparent

ap-par-ent
① ② ③

☐5☐ <2> temperature

tem-pera-ture
① ② ③

3. ☐6☐ ~ ☐9☐ In paragraphs 2 and 3, parts of the sentences indicated by < ☐ > are missing. Choose ONE answer for each to complete the sentences. Use each answer only once.

① your health is less than ideal
② the worse one's physical health is
③ your health is already compromised
④ even though there are no obvious symptoms of illness

4. Choose the most appropriate answers.

10	① Though	② On the contrary	③ Despite	④ Regardless	⑤ Following
11	① cause	② bring	③ meet	④ yield	⑤ release
12	① adopting	② throwing	③ suggesting	④ preserving	⑤ purchasing

5. [13] What does ‹3› they refer to? Choose ONE answer.

① mental and physical fitness　② measures　③ our abilities　④ the demands of life
⑤ fit people　⑥ daily psychological stresses　⑦ better employees

6. [14] Which TWO of the following are NOT mentioned as risk factors of disease?

① high blood cholesterol
② lack of sleep
③ smoking
④ not enough exercise
⑤ high-fat diet
⑥ drinking alcohol
⑦ inability to cope with stress

7. [15] Which ONE of the following is TRUE about IBM?

① IBM only hires new employees who already have healthy lifestyles.
② IBM requires its employees to be physically fit and emotionally strong.
③ IBM thinks promoting a healthy lifestyle to employees will reduce costs.
④ IBM plans to introduce a no-smoking policy for all of its employees.
⑤ IBM makes a lot of money from selling its wellness program to other companies.

2 Read the passage below and then answer the questions 1–8 about it. Boxes ([ ]) in the passage indicate missing information. Choose the most appropriate answers based on what is stated or implied in the passage.

Male or female, dependent or independent, we are each ‹1› faced with a major restriction when it comes to friendship: time. There will never be more than 24 hours in a day or 168 in a week. In adulthood, numerous competing priorities* mean we spend less time with friends. When 300 individuals—including teenagers, middle-aged adults and retired people—were asked where they were and what they were doing every two hours, teenagers were with friends 30 percent of the time while 40- to 65-year-olds logged just four percent of their time with friends and retired people eight percent. Every age group associated the presence of friends with pleasure. Married people were happier when they were with their friends than with their partners, although to be ‹2› fair, that could reflect that some time spent with partners is spent doing household tasks. What made people happiest was to be with both partners and friends. The researchers concluded: With friends our attention becomes focused, distractions* lessen, awareness of time disappears. We emerge into a world in which the closeness and joy shared with others is the ‹3› fundamental reality, and the world becomes a different place.

When time is limited, so are our relationships, [19] how many people we know. You simply cannot be in contact with all the people in your life to the same degree every day. Jeff Hall, a professor of communication studies in the U.S., wondered something basic: How much time does it take to make a friend? To find out, he surveyed 355 adults who had moved within the last six months. He asked each person to identify a potential friend they had met when they moved. "Where did you meet?" he asked. "How much time did you spend together last week? In a typical week? What kind of relationship would you say you have with this person? What do you do together? Do you hang out, work, talk?" In a second study, Hall caught first-year college students before they had a chance to make friends. Three weeks after arrival, he asked them to name two new people they [20] other than roommates. Roughly three weeks and six weeks later, he checked on the new relationships, asking students to add up the estimated hours spent with each person and report whether and when the relationship had gotten closer.

Hall was looking for 'cut points'—estimates of the amount of time necessary to bring a new person closer. Combining the two studies, Hall found it took between 40 and 60 hours to move from an acquaintance to a casual friendship, from 80 to 100 hours to call someone a friend and over 200 hours of togetherness before someone was rated as a best friend.

[21] people spent those hours mattered. By itself, time is not enough; neither is closeness. "I had people in the first study who spent in excess of 400 or 600 hours together with somebody at work and still only called them an acquaintance," Hall says. "We don't like everybody we work with and we don't want to be friends with everybody we work with." Hanging out and eating together were good for turning acquaintances into friends. The ways that people talked to each other mattered. "‹4› When you spend time joking around, having meaningful conversations, catching up with one another, all of these types of communication episodes contribute to speedier friendship development," Hall says. "Think about what it does if you and I are casual friends and, the next time I see you, I ask you what's been going on with your life. You catch me up. That action is meaningful because it says that whatever is happening in your life, I want to bring into the present in my relationship with you. Consider how many people you don't [22] to ask. You wander into the office, you say hey, and that's that."

While disclosing things about oneself is often viewed as critical in a relationship, Hall found it wasn't the only thing that mattered. He says, "When we focus too much on ‹5› that, we're neglecting the value of joking around with one another and seeing what's going on with each other. It's not that self-disclosure doesn't matter. It is that other things do, too." Even playing video games appeared to bring college students closer together, as did watching television and movies. Hall says, "I think it's about both. It's not that either you spend time joking around and catching up or you only play video games. Both are friendship-developing activities."

Fifty hours to make a casual friendship **<6> struck me as a high bar**. Surely there were people I had bonded with more quickly? Then I remembered Aristotle's observation that friendship takes time even if the wish for friendship comes quickly. What does fifty hours look like in real life? A college student could come more than halfway to that requirement by taking a class with someone for three hours per week. "Spending thirty hours with someone is not hard if you are a college student," Hall says. "It's super hard if your life is like mine when I have a wife and kids and a job, and my closest friends are hard to meet up with and time is of the essence." **<7> I'm right there with him**, I think.

<<NOTES*>>
　priorities = things that are regarded as more important than others
　distractions = things that take someone's attention

1. Choose ONE answer that is closest in meaning.

16	**<1> faced**	① convinced	② dealt	③ haunted	④ managed	⑤ confronted
17	**<2> fair**	① fine	② honest	③ critical	④ official	⑤ legal
18	**<3> fundamental**	① subjective	② conservative	③ ideal	④ underlying	⑤ required

2. Choose the most appropriate answers.

19	① counting on	② regarding	③ no matter	④ due to	⑤ in respect
20	① meet	② were meeting	③ would meet	④ have met	⑤ had met
21	① How	② How long	③ Which	④ What	⑤ Whether
22	① declare	② endure	③ worry	④ bother	⑤ spare

3. [23] For **<4> When you spend ...**, find the MAIN VERB of the sentence.

① spend　　② joking　　③ having　　④ conversations　　⑤ catching up　　⑥ types
⑦ communication　　⑧ episodes　　⑨ contribute　　⑩ speedier　　⑪ friendship　　⑫ development

4. [24] What does the author mean by **<5> that**? Choose ONE answer.

① study on friendship　　② making new friends　　③ finding a true friend
④ saying personal things　　⑤ a critical relationship　　⑥ information exchange

5. [25] What does the author mean by **<6> struck me as a high bar**? Choose ONE answer.

① The author was surprised it took such a long time to make a friend.
② It takes time for the author to bond with people around him.
③ It became apparent to the author that friendships don't last long.
④ The author suddenly realized the importance of making new friends.
⑤ The author finally discovered that friendships could hurt him.

6. [26] For **<7> I'm right there with him**, which ONE of the following is closest in meaning?

① I have to do the exact same thing.
② I want a life like his.
③ I'm visiting him soon.
④ I'll spend time with him.
⑤ I couldn't agree with him more.

7. [27] According to paragraph 1, which ONE of the graphs shows how time spent with friends probably changes as people age?
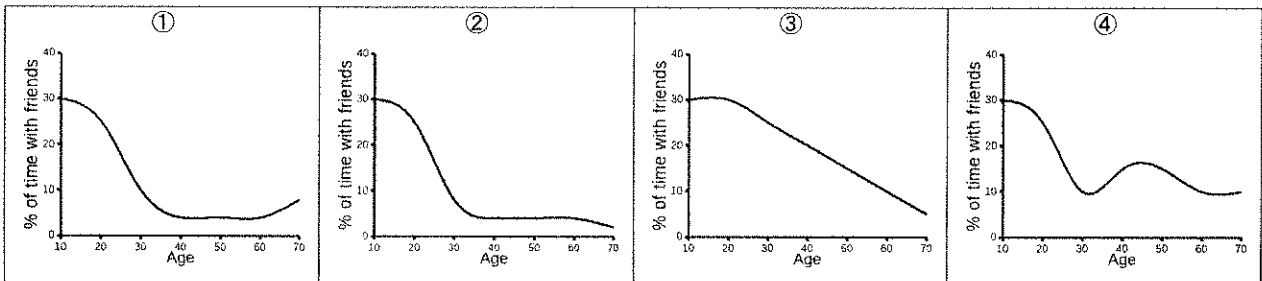
8. [28] Which ONE of the following is NOT mentioned as a way that people develop friendships?

① They have meals together.
② They live near each other.
③ They have meaningful conversations.
④ They catch up with one another.
⑤ They do activities together.

3 Read the passage below and then answer the questions 1–7 about it. Boxes ( ) in the passage indicate missing information. Choose the most appropriate answers based on what is stated or implied in the passage.

The social skills of small children are evident not only in vision but also in hearing. Spoken language comes to them just as easily as face perception. As Steven Pinker famously noted in his best-selling book *The Language Instinct* (1994), <1> "Humans are so naturally programmed for language that they can no more suppress their ability to learn and use language than they can suppress the instinct to pull a hand back from a hot surface." This statement 30 misunderstood: obviously, babies are not born with fully developed vocabulary and grammar, but they possess a remarkable capacity to acquire them in record time. What they have is not so much language itself, but the ability to acquire it.

Much evidence now confirms this early insight. Right from birth, babies already prefer listening to their native language rather than to a foreign one—a truly extraordinary finding which implies that language learning starts before birth. In fact, by the 7th month of pregnancy*, the baby is already able to hear. The melody of language, filtered through the wall of the womb*, passes on to babies, and they begin to memorize <2> it. In the last few months of pregnancy, the growing brain of the baby already recognizes certain auditory patterns and melodies, probably unconsciously.

This natural ability is obviously easier to study in babies born before their due date than in the womb. Once the baby has been born, we can 31 their tiny heads with miniature devices and sensors and look into their brains. With this method, Professor Ghislaine Dehaene-Lambertz discovered that even babies born two and a half months early respond to spoken language: their brain, although immature, already reacts to changes in syllables as well as in voices.

It was long thought that language acquisition does not begin until one or two years of age because a new-born child does not speak until then. And yet, in terms of language comprehension, a baby's brain is a true statistical engine. To show this, scientists had to use a variety of original methods, including the measurement of infants' preferences for speech and nonspeech input, their responses to change, and recordings of their brain signals. Results from these studies consistently revealed 32 infants already know about language. Right at birth, babies can tell the difference between most sounds in every language in the world. They already perceive them as categories. Take, for instance, the syllables /ba/, /da/, and /ga/. Even if the <3> corresponding sounds vary continuously, babies' brains treat them as distinct categories separated by sharp borders, just like adults.

These early natural skills become shaped by the language-related environment during the first year of life. Babies quickly notice that certain sounds are not used in their language: English speakers never produce sounds like the French /u/ and /eu/, and Japanese speakers don't distinguish between /r/ and /l/ as is done in English. In just a few months, the baby's brain sorts through its initial theories and keeps only the sounds that are connected to the languages that are present in <4> its environment.

《 ① 》

However, that's not all: babies also quickly start to learn their first words. How do they go about identifying them? First, babies rely on the rhythm and intonation of speech—the way our voices rise, fall, or stop, thus marking the boundaries between words and sentences. Another mechanism identifies which speech sounds follow each other. Again, babies behave like statisticians. They realize, for example, that the syllable /bo/ is often followed by /tl/. A quick calculation of possibilities tells them that this combination is not random: the likelihood of /tl/ following /bo/ is too high; these syllables must form a word, "bottle"—and this is how this word is added to the child's vocabulary and can later be related to a specific object or concept. As early as six months of age, children have already figured out the words that appear with a high frequency in their environment, such as "baby," "daddy," "mommy," "bottle," "foot," "drink," and so on. These words become fixed in their memory to such an extent that, as adults, they continue to hold a special status and are processed more effectively than other words of comparable meaning, sound, and frequency acquired later in life.

《 ② 》

Statistical analysis also allows babies to identify certain words that occur more frequently than others: small grammatical words such as articles (a, an, the) and pronouns (I, you, he, she, it...). By the end of their first year, babies already know many of these words, and can use them to find other words. If, for example, they hear one of their parents say, "I made a cake," they can separate the small function words "I" and "a" and, by elimination, 33 that "made" and "cake" are also words. They already understand that a noun often comes after an article, and that a verb usually comes after a pronoun—to such an extent that, around twenty months of age, babies react with complete surprise if they are told meaningless phrases like "I bottle" or "the finishes."

《 ③ 》

Of course, such an analysis isn't entirely reliable. For example, when French children hear "*un avion*" (an airplane), which is pronounced by smoothly linking the words together, they often incorrectly assume the word is *navion*. Conversely, English speakers imported the French word *napperon* (place mat) and, due to mishearing the distinct parts of the phrase *un napperon*, invented the word *apron*.

《 ④ 》

No other species is capable of such abilities. Experiments to test this 34 many times. Several scientists tried adopting baby chimpanzees, treating them like family members, and speaking to them in English or sign language or with visual symbols. However, after a few years, none of these animals mastered a language worthy of the name: the chimpanzees only knew, at most, a few hundred words. The linguist Noam Chomsky, therefore, was probably right in suggesting that our species is born with a "language acquisition device," a specialized system that is automatically triggered in the first years of life. As Darwin said in *The Descent of Man* (1871), language "certainly is not a true instinct, 35 every language has to be learnt," but it is "an instinctive tendency to acquire an art." What we are born with is the instinct to learn any language.

《 ⑤ 》

<<NOTES*>>
  pregnancy = 妊娠
  womb = 子宮

1. [29] For <1> "Humans are so ...", which ONE of the following best expresses its essential information?

① Learning a language is important to avoid danger.
② Every human is able to learn and use a language.
③ A lack of language skills can prevent the ability to learn.
④ Humans naturally use hand gestures when speaking.

2. Choose the most appropriate answers.

[30]	① maybe	② might not be	③ should not be	④ would have been	⑤ cannot have been
[31]	① equip	② supply	③ associate	④ bond	⑤ lay out
[32]	① where	② which	③ when	④ whether or not	⑤ how much
[33]	① discover	② discovers	③ discovered	④ discovering	⑤ are discovering
[34]	① attempted		② were being attempted		③ had attempted
	④ have been attempted		⑤ will have been attempted		
[35]	① unless	② whereas	③ for	④ during	⑤ as long as

3. [36] What does <2> it refer to? Choose ONE answer.

① evidence   ② insight   ③ native language   ④ a foreign language   ⑤ language learning
⑥ pregnancy   ⑦ the baby   ⑧ melody   ⑨ language   ⑩ wall   ⑪ womb

4. Identify the most stressed vowel, and choose ONE word that has the same vowel pronunciation.

[37]   <3> corresponding

① heat   ② sit   ③ wet   ④ cat   ⑤ bird   ⑥ cut   ⑦ food   ⑧ book   ⑨ stop   ⑩ stay   ⑪ sky   ⑫ old

5. [38] What does <4> its refer to? Choose ONE answer.

① English   ② French   ③ Japanese   ④ months   ⑤ brain
⑥ theories   ⑦ sounds

6. Match the following sentences with the corresponding paragraph.

[39]	Paragraph 2 matches with which ONE of the following sentences?
[40]	Paragraph 3 matches with which ONE of the following sentences?
[41]	Paragraph 4 matches with which ONE of the following sentences?

① Babies can recognize the correct word order of basic phrases.
② Babies begin learning the sounds of their native language before birth.
③ Babies learn their first words by noticing sounds that commonly occur in a certain order.
④ Babies born early can recognize changes in sounds and voices.
⑤ Babies can distinguish the sounds of a language even though they cannot speak.

7. [42] The following paragraph was taken from the passage. Which location indicated by ≪ ① ≫ - ≪ ⑤ ≫ was it taken from?

≪ Such errors are rare, however. In a few months, children quickly manage to perform better than any existing artificial intelligence. By the time they blow out their first birthday candle, they have already laid down the foundation for the main rules of their native language at several levels, from elementary sounds to rhythm and intonation, vocabulary, and grammar rules. ≫