托福听力核心题库

2021/03/23 发布

针对 2021/03/27 考试

【托福听力最新考情分析&机经使用说明】

◆ 托福听力最新考情分析

根据小站教研中心的对每场考试的跟踪研究，托福听力的最新考情变化主要体现在以下两个方面：

1. 题目难度的变化

托福听力的难度正在一点点加大，听力语速变快，讲座结构变得更加复杂，除传统选择题外，**多选题、排序题、搭配题及重听题**出现的概率也有所增加。建议考生在平时练习中提前熟悉各类题型。

2. 考试形式的变化

自去年 3 月 4 日以来，托福听力以**多卷形式**出现，试卷由计算机随机分配，每位考生遇到的题目都不完全一致。一场考试中，conversation 和 lecture 篇目总数甚至多达 20 篇，但多套试卷的难度基本一致，以最大可能保证考试的公平。

3. 加试情况的变化

自 2017 年以来，托福听力遇到**加试**的可能性越来越大，如遇加试则听力考试时间延长至 90 分钟，这对考生的脑力和体力来说都是不小的考验。建议大家在平时练习的时候就有意识地把 3 个 section 连起来练习，训练自己提前适应考试时候的强度；另外，经典加试已经退出历史舞台，现在的听力加试全是**非经典加试**，且出现**顺序不固定，因此很难识别出哪一个 section 是加试**。所以如果大家遇到了加试，最保险的策略就是认真完成每一个 section 的题目。

◆ 机经使用说明

小站听力核心预测精选 2015-2017 年 **37 篇听力真题**，所有真题均配有**音频、题目、Script、答案及文章大意**。

本套机经主要有以下四种用途：

1. 作为补充练习材料

同学们可以把机经里的真题当做练习题来做，尤其适合程度较好、刷完 TPO 以后面临题荒或马上就要考试、需要适应真实考试难度的同学；大家下载下来音频和文档后，可以按照考试的顺序先听音频、做题，然后核对题目后的正确答案，再针对错误地方进行精听巩固。

2. 作为预测材料

本套机经的题目均来自最新真题，根据 17 年至今托福听力真题的出题趋势挑选出来的，均为托福听力考试的热门话题。如果时间充裕，建议同学们在考前把 37 篇听力都动手做一下，做完后核对答案，找出自己没有听懂的地方进行弥补；如果时间紧张，则可以只看听力文本和文章概要两部分。

3. 作为背景知识补充材料

索引部分教研老师已经把听力材料进行了学科和话题二级分类，同学们可以根据自身具体情况，挑选自己不熟悉的话题或学科的篇章进行重点练习，在练习的过程中注意积累场景和学科词汇，必要的时候可以自行上网查找相关的学科背景知识，以帮助自己补齐短板。

PS：个别配套音频语速较慢，建议同学们用加速软件提高到 1.5 倍速进行训练。

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Conversation

C1

题目

1. Why does the woman go to see the professor?
A. To ask the professor to explain a point she was confused about in class
B. To discuss an early version of a paper she is writing for class
C. To explain what revisions she made to a paper in response to the professor's comments
D. To hand in a paper on honeybees that she just completed

2. What mistaken idea does the professor suspect the woman might have?
A. That honeybees dance only for the purpose of communicating with one another
B. That scientists are certain that bees use magnetic fields for navigation
C. That Earth's magnetic field helps honeybees communicate with one another
D. That honeybees have a highly social organization

3. According to the woman, what factor determines whether a honeybee does a round dance or the more complex waggle dance?
A. The type of food it found
B. The richness of a food source it found
C. The relative distance of a food source from the hive
D. The number of bees observing the dance

4. During the conversation, what does the professor come to realize about the woman?
A. That she understands what Earth's magnetic field helps honeybees do
B. That she does not understand some aspects of honeybee communication
C. Why she chose a nonacademic source of information for her paper
D. That she accurately expressed in the paper exactly what she had intended to express

5. What does the professor imply when he suggests the woman should find the original research report?
A. He is not familiar with the article the woman used for her paper.
B. He wants the woman to compare the original research report with a more recent one.
C. The original research report includes additional experiments that the woman should mention.
D. The source used by the woman presents information in an unclear manner.

听力文本

Narrator: *Listen to a conversation between a student and her biology professor.*

Professor: Hi, Suzanne. You' ve been keeping busy?

Suzanne: Really busy. It' s that time of the semester. I' m glad I turned in the first draft as my paper for your class already. Thanks for getting to it so quickly and for seeing me today.

Professor: Sure. Yes, it looks like it will be a good paper. Great topic but I think it could use a little more work because it' s just that I found it a bit unclear in places so I want to make sure I understand what you intended to do before I make suggestions for admissions.

Suzanne: Okay.

Professor: So can you summarize, tell me in a few sentences the main ideas you want to get across?

Suzanne: Okay. Well, honeybees can communicate the location of food to other honeybees and the idea was to describe how they use Earth' s magnetic field in that process.

Professor: To help them communicate?

Suzanne: No, to help them find their way, to navigate.

Professor: Okay. See, I wasn' t sure you separated those two ideas. One that honeybees could communicate with other honeybees and two, that they might be using the magnetic field but only for navigation.

Suzanne: Oh.

Professor: Are you sure you understand that?

Suzanne: I think so. After they find food and return to the hive, they move in different ways to communicate different things. Like they do a simple dance, the round dance, to communicate that a food source is nearby. But they do a more complex dance, the waggle dance, if the food is farther than, like seventy-five meters away. Both dances convey information about the distance from the hive to the food source and the waggle dance conveys the direction of the food from the hive.

Professor: Okay, good. And where is the magnetic field for that?

Suzanne: Well, they have cells in their body that contains iron. So we assume that they' re able to sense Earth' s magnetic field, which might help them navigate. It' s likely that they have an internal compass, like if they get blown off course by the wind, they can get back on course.

Professor: Okay, good. The thing is in your draft, it rather showed that the magnetic field was irrelevant to the bee dance through communication. I looked over your list of sources and I thought I could see why.

Student: There' s a problem with my sources?

Professor: Well, the article you sited on magnetic navigation isn' t very academic. It' s more of a general interest article. I thought that maybe you relied too much on its wording so I was going to suggest you go back and find the original research report which presents the information in a more precise and clear way. But maybe you just need to revise your own wording in your paper. I think when you look at it again you will know what I' m talking about. If you have any questions, come by again.

答案

1. B 2. B 3. C 4. B 5. D

文章大意

女生去见教授，两个人开始谈论女生几天前交上的一篇论文的初稿。教授先让女生说了说她想表达的主要意思，女生说她主要想说明蜜蜂可以利用磁场来告知其他蜜蜂食物的位置。但是教授随后指出，女生在论文里写的“蜜蜂可以和同伴交流以告知其食物位置”和“蜜蜂利用磁场导航”之间并没有清晰明确的联系，并要求女生回去再查一下更加可靠的学术文献。

C2

题目

1. Why does the student go to see the professor?
A. To find out why the mining industry in the western United States declined in the 1800s
B. To find out how to improve the first draft of a paper she is writing
C. To ask the professor to recommend sources of information for a research paper
D. To get advice about a possible topic for a research paper

2. What aspect of the history of Park City, Utah, interests the student?
A. The reasons Park City went through periods of economic hardship and success
B. The reasons Park City became a destination popular among skiers
C. How Park City became the main source of silver in the United States
D. Why Park City recovered from a national recession more quickly than other towns did

3. What does the professor say were two important factors in the decline in silver mining in Park City, Utah?
Click on 2 answers.
A. The increasing cost of extracting silver
B. A decline in the price being paid for silver
C. The higher wages being paid to miners in other places
D. A national downturn in economic activity

4. Why does the professor mention the town of Bodie, California?
A. To emphasize the economic problems in the mining industry during the early 1900s
B. To illustrate the wide appeal of skiing in the United States in the early 1900s
C. To give an example of a former mining town that survived without becoming a ski resort
D. To give an example of a town that remained a mining town well into the 1900s

5. What do the student and professor agree that the student should do as part of her research?
Click on 3 answers.
A. Try to find firsthand accounts of life in mining towns
B. Investigate in detail the events in a few specific towns
C. Consider the role of flooding in the decline of Bodie, California
D. Determine why most failed mining towns did not recover economically
E. Look at the history of mining towns in the context of the history of the United States as a whole

听力文本

Narrator: *Listen to a conversation between a student, and an American History professor.*

Karen: Professor Farrington? I have a quick question. Uh- about something you said in class yesterday?

Professor: Sure, Karen.

Karen: You mentioned that um, about how Park City in Utah went from a Boom Town in the 1800s to a Ghost town, and then became prosperous again. I was - Well, that' s an interesting cycle, and well, maybe for my research paper, I...

Professor: Yeah, that might make a good topic! Since similar things happened in other mining towns.

Karen: So, comparing them might be interesting?

Professor: Yup. Absolutely.

Karen: So what triggered the downward turn in Park City?

Professor: Well, in 1870, there were fewer than few hundred people living in the Park City Area. After silver was discovered there, the population grew very quickly! I think it reached about..10,000? By 1900s. But, soon after that, the silver that was close to the surface had all been mined. So they had to dig deeper and deeper. Which reduced the profit margin, not-not just because it' s time consuming, but going deeper led to problems of flooding. It' s time consuming and expensive to pump water out mud. So, that was the big thing! I think. I mean, there are other factors that contributed, too. Like, the recession and a stock market panic in 1907, if you do write about this, you have to get into that.

Karen: Okay! And it was… what, tourism that brought it back up again?

Professor: Basically, yes. The ski industry kind of stopped and started about the same time. In the 1920s. At first it was only a few folks hiking up to the top of the mountain and then skiing down, as the sport became popular, so did the mountains around Park City. By the 1960s, it was a major ski resort, with thousands of skiers.

Karen: And the same with the other abandoned mining towns?

Professor: Well, some. But some became tourist attractions not because of skiing, but because people were interested in their history. Um, one old mining town in the middle of the Californian desert, it' s called Bodie. That' s now State park. It' s popular because the buildings have been preserved as they were in the 1940s.

Karen: Wow. So maybe I could choose a couple of towns that went through that whole cycle and talk about them in some depth, as a way of illustrating the general boom and bust phenomenon? Maybe find some firsthand accounts?

Professor: Well, for this, yes - it' d better to go into some depth about specific towns. Rather than talking about a lot of them in broad terms. And yeah! Definitely, give it a shot! But, you probably won' t be able to find many diaries or personal accounts. Not many people who lived in mining towns could read or write. Oh, and also, remember the impact of National Events.

Karen: Right. The local AND the national. Okay. Thanks!

答案

1. D 2. A 3. AD 4. C 5. ABE

文章大意

女生对于教授在课上讲的 Park City 的繁荣-衰退-繁荣过程非常感兴趣，打算把这个主题当作她的论文主题。教授仔细和女生讨论了 Park City 衰退和兴盛的原因，并且和女生讨论了写论文的时候需要注意的几个点。

C3

题目

1. Why does the woman go to see the professor?
A. To ask his opinion regarding a debate about the origins of the Berber people
B. To get feedback on a paper that she recently submitted
C. To propose an alternative topic for a paper she is working on
D. To clarify a point that the professor made in class

2. According to the woman, what error did she make in writing her original paper?
A. She did not follow the advice of the professor's graduate assistant.
B. She forgot to include information about the ancient Romans and Egyptians in the paper.
C. She began writing the paper before completing all the necessary research.
D. She did not provide citations for all the sources she used to write the paper.

3. How does the professor respond when the woman tells him that she wrote a new proposal?
A. He suggests that the woman's original proposal was stronger than the new proposal.
B. He indicates that he could have helped the woman find suitable material for her original proposal.
C. He expresses disappointment that he did not have an opportunity to suggest a new topic for the woman.
D. He suggests possible sources of information about the woman's new topic.

4. What topic is covered in the woman's new proposal?
A. The difference between civilizations that have writing and those that do not
B. The ways in which international organizations interact with contemporary African governments
C. The role of education in premodern Berber societies
D. The ways in which children in some modern-day nomadic communities are educated

5. What is the professor's opinion of the woman's new topic?
A. It is preferable to her original topic.
B. It meets the assignment's requirements.
C. It is too broad to be covered adequately.
D. It is not relevant to current events.

听力文本

Narrator: *Listen to a conversation between a student and her anthropology professor.*

Student: You know the topic I submitted for my research proposal, the historical origins of the Berber people of North Africa? Well, I started writing and it just wasn't working for me. I'm pretty much going nowhere with the research.

Professor: I'm sorry to hear that. It was such an original choice. What happened?

Student: Well, I found plenty of information about Berber's society in present day North Africa. But even though the evidence points to Berber civilization probably dating back five thousand years, there's no real scholarly consensus about their ancestry.

Professor: That's true. We don't have a consensus. Feelings about their origins range from parts of Europe to the Middle East. Part of the problem is that the Berber language wasn't traditionally a written one so there aren't any historical records written by the Berbers themselves that we can trace back to antiquity. As a result, it's hard to find any direct evidence of their origin.

Student: Yeah. The ancient Egyptians and Romans mentioned them a bit. I thought it was great when the graduate assistant, Raymond, recommended this topic to me. But along with the opposing theories, the main thing is that I just don't feel I will get enough material to base a paper on. Maybe I should have talked to you first, but I went ahead and wrote a totally new proposal. I hope that's okay.

Professor: Yes, of course. But I wish we would've had this talk before you veered off into this new direction. You know, even though historians haven't come to a consensus, we could've worked together and I'm sure you could've

written a good paper acknowledging of course that disagreements about the Berber's origin exist.

Student: Oh, okay.

Professor: And I also would have directed you to Anthrotopics as a place to look.

Student: Anthrotopics? It rings a bell.

Professor: I'm sure I mentioned it in class. It's a good website for scholarly sources on anthropological classes. Check it out. Maybe you could come back to the Berbers for your second paper.

Student: Okay. I will think about it.

Professor: But in the meantime, you said you have something else?

Student: Yes, it's about nomadic populations and schooling in parts of Africa like how the whole issue of children attending school is being addressed in modern nomadic communities.

Professor: That's certainly is a timely topic. In fact, I just read a recent study on this subject. African governments and international agencies are struggling to figure out how to deal with this issue.

Student: I've brought you a copy of the proposal and this time I went ahead and did some research first so I know the material is there. It's not a historical topic. Is that a problem?

Professor: Well, the assignment was to write on an anthropological problem related to an African community. The topic doesn't necessarily have to be historical.

答案

1. C 2. C 3. B 4. D 5. B

文章大意

女生去找教授，说自己在写的一篇论文存在困难，困难就是她发现可以找到的材料虽然多，但是研究者们并没有达成共识。教授说研究者确实在这个话题上没有达成共识，因为 Berber 人并没有书面语言，所以没有留下直接证据。女生说自己又换了一个新的主题，但新的主题不是历史事件。教授说没有关系，只要是人类学的话题就可以。

C4

题目

1. Why does the woman go to see the professor?
Click on 2 answers.
A. To discuss an assignment for class
B. To confirm that she correctly interpreted what she saw in a classroom
C. To get advice on the most effective way to observe a classroom in action
D. To find out how to implement a progressive teaching approach

2. What does the woman emphasize when she defines the progressive approach to teaching?
Click on 2 answers.
A. The approach works best in mathematics lessons.
B. The term progressive approach has more than one meaning.
C. Children are given some control over what they learn.
D. The teacher recognizes individual learning styles.

3. What happened if students were unable to solve the math problem they chose?
A. They were given a clue to the solution by the teacher.
B. They asked for assistance from other students.
C. The teacher gave them a different problem to work on.
D. The teacher asked another group to work on the problem.

4. What does the woman conclude about the lesson she observed?
A. It was not typical of the progressive education approach.
B. It was more beneficial to the students assigned the problem than to the helpers.
C. It helped some students overcome shyness about working in a group.
D. It provided both social and academic benefits to students.

5. Why does the professor say this:
A. To ask the woman to repeat what she said
B. To indicate why he disagrees with the woman's previous statement
C. To explain what aspect of the exercise was not progressive
D. To find out why the woman was surprised

听力文本

Narrator: *Listen to a conversation between a student and her education professor.*

Karen: Professor McGraw?

Professor: Oh hi, Karen, what can I do for you?

Karen: Well, I might just start writing that paper that' s due next week

Professor: Okay.

Karen: And I' m thinking I' d like to write it on the classroom observations I' ve been doing.

Professor: What level are you observing?

Karen: Fourth grade.

Professor: Okay. That sounds fine. Lots of students write about their classroom observations.

Karen: But before I start, I want to check to see if I' m on the right track with my observations.

Professor: Okay.

Karen: Okay. As I' ve said, I' ve been observing a fourth grade class and the teacher follows a progressive approach to teaching, so I thought I' d write about a mathematics lesson that I observed last week, how it fits in with that approach.

Professor: Okay. What can you tell me about the progressive approach?

Karen: It' s about accommodating each student' s individual learning style, right?

Professor: Right.

Karen: Each student is seen as having his or her own learning

style, so instead of having one planned format or lesson for the whole class, the teacher has each child work at their own pace on their own project in a way that works best for them.

Professor: Okay, good. Now, how does this work in the lesson you've observed?

Karen: Well, first the teacher asked six students to find a math problem that interested them, or that they found difficult and to write it on the board. That surprised me, because it seemed more like a traditional teacher-led activity than a progressive one.

Professor: But who chose the math problem?

Karen: The students did, which I eventually realized made it the kind of activity you would find in a progressive classroom.

Professor: And what was the rest of the class doing?

Karen: They were helpers. If a student wasn't sure how to solve the problem, they asked one of the helpers to join them at the board and well, help.

Professor: And did they?

Karen: Yeah, and if both students got stuck they could ask another student so it ended up with groups of three or four kids working together to solve a math problem. I could see the teacher was getting the students started, but the students then directed themselves and worked together to come up with the answer.

Professor: Which is very much a part of what progressive education is all about. In that way, the curriculum, or what is being learned, centers around what the learners are interested in. What other elements of progressive education did you

observe?

Karen: Well, the students were learning in groups so they were learning social skills like negotiation and the activity was designed so no one felt like a failure. In the end, all the problems were solved successfully and all the kids seemed feel a sense of accomplishment. They were smiling. From what I can tell, the activity met the kid’ s social needs and their emotional needs as well. It was pretty cool to watch.

答案

1. AB 2. CD 3. B 4. D 5. B

文章大意

学生和教授讨论自己打算拿来写论文的数学课观察内容。在数学课上，老师会让6 个学生上台，把问题写在黑板上，然后其他人来帮助他们解决。这样一来学生们自主解决了问题，二来还同时进行了社交以及获得了成就感。

C5

题目

1. Why does the woman go to see the man?
A. To get details about postgraduate research opportunities at another university
B. To find out if alternatives exist to the biology department's summer program
C. To get permission to do an independent study project over the summer
D. To inform the man of a change in her plan of study.

2. How does the man respond to the woman's decision to study biology?
A. He is pleased by her decision.
B. He warns the woman about a potential problem with her decision.
C. He thinks the woman should wait a year.
D. He questions her reasons for making the change.

3. Why does the man mention several different branches of biology?
A. To suggest some possible research areas for the woman's independent study project
B. To indicate that the woman will need to decide on an area to specialize in
C. To point out an advantage of the biology program at the York Institute of Technology
D. To encourage the woman to start thinking about which courses she will take next year.

4. What is the woman's decision about doing an independent study project?
A. She will do one at the York Institute of Technology.
B. She will wait until the following year to do one.
C. She does not need to do one to graduate on time.
D. She will do one on a topic in mathematical modeling.

5. What does the woman say about receiving an incorrect grade?
A. She is unsure how to get the error corrected.
B. She is checking to see if the error has been corrected.
C. She believes it might affect her acceptance into the York Institute of Technology.
D. She is worried that her professor has not yet completed the paperwork regarding the grade.

听力文本

Narrator: *Listen to a conversation between a student and her academic advisor.*

Advisor: What' s on your mind, Sara?

Sara: Well, I've been taking a couple of biology classes this semester, and I really like it and well, I'd decided I'd like to change my major field of study and get a degree in biology instead of math.

Advisor: Oh okay. But you only have two more years here before you're scheduled to graduate. And you know that is probably not enough time to take all the courses you need. So, if you change your major you may end up graduating late.

Sara: Well, but you know the biology department summer program, the one just for undergraduates?

Advisor: Sure, but the application deadline has already passed.

Sara: Oh yes, I know. What I wanted to ask is, well, do you know of any similar programs elsewhere where I can take the courses and have the credits transferred here?

Advisor: Okay. I see now. Well, a few of our students have attended the summer program at the York Institute of Technology on the other side of the city. Their summer program in the biology is a good one. They offer a variety of areas to focus on like cell biology, marine biology, even biotechnology. It will all be on their website.

Sara: Wow! Sounds good!

Advisor: You could take two courses there this summer which would apply to your degree here.

Sara: Oh, but I would need to take three to graduate on time.

Advisor: Well, maybe you can do the York Summer Program and an independent study project with one of your biology professors here.

Sara: Okay.

Advisor: But many professors here have already left for the summer, so you might have difficulty finding someone to supervise you this summer. But maybe you could schedule up for next summer.

Sara: Now, that would work. I will do that. Do you know when the application deadline is for the York?

Advisor: It’s a week from now.

Sara: Guess I will have to act fast. But one thing. When I got my grades back last semester, the grades from my mathematical modeling class was wrong. It was lower than what I actually earned. My professor submitted the paperwork to get it corrected but he said it could take us a week before the right grade shows up on my official records. What if York Institute wants to see my grades when I apply?

Advisor: Well, if it’s not corrected in time, ask your professor to write a letter explaining the situation and include it in your application. That should be acceptable.

答案

1. B 2. B 3. C 4. B 5. C

文章大意

女生想从数学专业换到生物专业，但是她的时间不够，可能会晚毕业。女生想去参加 summer program，并且兑换学分。但是又发现自己的一门课的成绩错了，担心会影响申请，男生说可以把教授开的说明信附上去，这样应该就没有问题了。

C6

题目

1. Why does the man visit the employment office?
A. He needs a job that will allow him to work more hours.
B. He needs information about summer internships.
C. He wants to register for a job fair.
D. He wants information about job opportunities for recent graduates.

2. What misunderstanding did the man have about the job fair?
A. He thought that jobs for biology majors would not be available.
B. He thought that only graduating seniors would be attending.
C. He thought that the date for registration had passed.
D. He thought that an advisor's signature was required for those attending.

3. What does the woman say about biology majors?
A. They may be eligible for jobs at the biology labs on campus.
B. They qualify for jobs that pay more than most other jobs.
C. They should check with the head of the biology department about job openings.
D. Those with laboratory experience have a better chance of being hired.

4. What is the man's attitude about working as an intern?
A. He believes that there are no internships related to his major.
B. He is interested only in jobs for which he would earn academic credit.
C. Working as an intern would not pay well enough.
D. Working as an intern is not a priority for him.

5. What does the woman imply about employment on campus during the summer?
A. Students do not work on campus during the summer.
B. Summer jobs on campus usually pay less than other summer jobs.
C. Very few campus workplaces are hiring new employees for the summer.
D. The man can apply for summer jobs on campus during the job fair.

听力文本

Narrator: *Listen to a conversation in a university employment office.*

Student: Hi, I' m looking for information on temporary jobs, something just for the summer. Would you have information about that?

Employee: We do, but you realize most of what we do here is help

graduating seniors find permanent entry level positions. Let's see. Are you looking for on-campus or off-campus work?

Student: Actually, I work on-campus in the cafeteria now, but it's only a part-time job about 15 hours a week. I was hoping to find something a little more...

Employee: With a few more hours.

Student: I've asked for more hours at the cafeteria, but they don't have anything available, so now I'm here.

Employee: And an off-campus job would be okay?

Student: Sure. I mean, if anything is available.

Employee: Okay, one thing I can suggest to do is to register for the job fair coming up in a couple of weeks.

Student: Job fair? I thought that was only for graduates looking for permanent jobs.

Employee: You're right. Most of the companies they will be looking to hire recent graduates for permanent jobs, but there will be a few that are trying to hire students for summer work. There are also usually some internships advertised there. The pay is okay, and they're full time and you might even be able to get some academic credits as long as it relates to your major, which is?

Student: Biology.

Employee: So I assume that you do a lot of work in the laboratory?

Student: Some, yeah.

Employee: That's great. There will be some companies and maybe a

couple of hospitals at the job fair looking for biology majors for summer internships, especially those with lab experience. But you know, keep your eyes open. A lot of jobs can qualify as internships even if they don't have the word "intern" in the title as long as the work is somehow related to your major. Of course, there's some paperwork involved: getting it okayed by your department and getting your advisor's signature.

Student: So even if I'm doing, I don't know, some kind of office work, I can get class credit?

Employee: That tends to be the case, not always but...

Student: I guess an internship would be okay, but I don't want to limit myself. I will take anything. It's just for the summer but as far as on-campus jobs...

Employee: Okay. You understand with so few students on campus during the summer, there's really no need...

Student: For anybody to hire any more workers?

Employee: It would be very difficult to find anything.

Student: Okay. Do you have a list of who's going to be hiring at the fair?

Employee: Sure. I have a list of the companies and the positions they're hiring for.

Student: Thanks.

答案

1. A 2. B 3. D 4. D 5. C

文章大意

男生表示想找工作，他之前有一项校园里的工作，但是觉得工作时间太短了。招聘会上又是招全职比较多。但女生说招聘会上还是有很少的实习工作的，和男生的生物学专业挂钩的还可以得学分。但男生表示不想把自己限制在和专业相关的工作里面。女生表示校园内的工作机会还是很少的。女生最后给了男生招聘的单位的名单。

C7

题目

1. Why does the student go to see the facilities director
A. To find out when the current parking garage construction will be completed
B. To provide student input about the lack of parking accommodations on campus
C. To get information about the upcoming Oak Tree dormitory renovations
D. To present ideas that could improve living conditions in the Oak Tree dormitory

2. What does the student say about the parking garage?
Click on 2 answers.
A. It will be very cold in the winter.
B. It will be convenient.
C. It will be unpleasant to look at.
D. It will increase nearby traffic.

3. Why does the facilities director mention the head groundskeeper?
A. To acknowledge that the student's comments are worth consideration
B. To point out that this year's budget for planting trees has already been spent
C. To identify the person the student will need to meet with next
D. To illustrate how many people are involved in building the parking garage

4. What point does the student make about Tommy Reynolds?
A. He came up with the idea to plant trees between the dormitory and the garage.
B. He is interested in attending the facilities department meeting to represent the dormitory residents' interests.
C. He convinced the dormitory residents to get together to write down their concerns.
D. He provided the calculations that support renovating the dormitory.

5. What is the facility director's attitude about installing additional insulation?
A. She is pleased that she has student support for the project.
B. She hopes the project can be completed before the end of the year.
C. She is doubtful that the current residents would benefit from the modification.
D. She does not believe that there will be sufficient cost savings.

听力文本

Narrator: *Listen to a conversation between a student and a facilities director.*

Mike: Hello, Ms. Miller. My name is Mike Johnson and I represent

the students who live in Oak Tree dormitory.

Ms. Miller: Nice to meet you. I understand that you have a proposal for me.

Mike: Yes, a couple of them, actually.

Ms. Miller: Okay. I' m all ears. What' s your first one?

Mike: We' re concerned about the new parking garage that the school is building next to our dorm.

Ms. Miller: Yes, the new campus parking garage.

Mike: Those of us who have rooms on that side of the dorm used to have a view of the fields with trees and grass but now it' s all dirt and concrete. And when the structure is completed, there will be no view at all. All we' ll be able to see is an ugly parking garage.

Ms. Miller: Well, we' ve worked long and hard to figure out how best to ease the strain on parking here on campus.

Mike: Of course, and it will be very convenient for us since it' s close. It' s just... Well, no one wants to look out their window at a parking garage.

Ms. Miller: But, what would you like me to do about this?

Mike: We hope you' d consider planting some trees in the area between the dorm and the garage.

Ms. Miller: Trees.

Mike: Yeah, I mean, first of all, it will improve the view. It will be nicer to see a bunch of trees than a concrete garage.

Ms. Miller: Okay.

Mike: And beyond that, it will replace all the trees that were cut down to build the garage. It's one way to lower our university's carbon footprint and be more eco-friendly.

Ms. Miller: That is a very good idea. And actually, just the other day I was talking with the head groundskeeper about planting more sage trees on campus. I asked him to come up with a plan that I can present at our next facilities department meeting. I'll ask him to consider your request if he comes up with this plan.

Mike: That's great. Thanks. Our other requests involve insulation.

Ms. Miller: Insulation.

Mike: Yes, the dorm is really loud. You can always hear people talking in the hallways, their music, their phone conversations, everything. Worse than that, it gets really cold in the winter, so we'd like to have more insulation installed in the dormitory.

Ms. Miller: That would be expensive.

Mike: We've considered that. One of our residents, Tommy Reynolds, whose major course of study is architectural engineering, worked it out. He thinks that installing insulation in our dorm will actually save the university money.

Ms. Miller: How so?

Mike: Well, it will cost less to heat the dorm in the winter and less to cool it in the warmer months. Those savings will more than pay for the initial expenses of installing the insulation after just a few years.

Ms. Miller: Here's the thing, Mike. I can bring this up at our facilities department meeting as well. If Tommy's figures hold up under scrutiny, we might even be open to considering the undertaking. But a lot of planning would have to be done before something of this nature has begun so I'm not sure if the current dorm residents would see the end results.

答案

1. D 2. BC 3. A 4. D 5. C

文章大意

男生去找女生，提出了两个要求：一个要求是在宿舍和车库之间种植树木，还有一个要求是给房间做隔音。女生说隔音可能很贵，男生说他同学算过了，给房间做隔音反而会省钱，因为隔音材料可以让房间冬暖夏凉。女生说会把男生的想法上报的。

C8

题目

1. Why is the woman having a problem at the computer lab?
A. She cannot find updated printing instructions online.
B. The computer she is using is not connected to a printer.
C. She is not aware of the new limit on printouts.
D. She is not aware of the change in the process for printing documents.

2. How does the computer lab's new procedure save paper?
A. It requires approval for the printing of documents beyond a certain length.
B. It rewards students for using recycled paper.
C. It prevents students from printing documents accidentally.
D. It allows students to print only documents that are class related.

3. Why is the woman interested in an internship at the greenhouse?
A. She hopes it will lead to a permanent job there.
B. She wants to broaden her experiences.
C. She is considering changing her major course of study to biology.
D. She needs to fulfill a requirement for graduation.

4. What can be inferred from the speakers' discussion of the man's friend?
A. The woman knows the friend from one of her engineering classes.
B. The woman hopes the friend can help her get the internship.
C. The friend would not advise the woman to work at the greenhouse.
D. The friend started the youth program at the greenhouse.

5. What benefits of a green roof does the woman describe?
Click on 2 answers.
A. It can help decrease energy costs.
B. It collects rainwater to supplement the building's water supply.
C. It provides research opportunities for students.
D. It reduces water pollution in the area.

听力文本

Narrator: *Listen to a conversation between a student and a consultant in the computer lab.*

Student: Could you check the settings in this computer?

Consultant: Sure, what’ s wrong?

Student: I've clicked print like four times but nothing's happening.

Consultant: Well, this will be an easy fix. Today must be the first time you've been in the computer lab this month, huh?

Student: Yeah.

Consultant: Alright, well, on the first of this month we started something new. Okay, so you already knew how to send something to the printer.

Student: Right, that's what I tried.

Consultant: So after that we added a new step, printing station.

Student: What are those?

Consultant: It's a station. Well, a computer actually, next to every printer now. You'll need to go to the printing station and you'll see a list of all the documents that people have sent to the printer. Find your document on the list, click on it and it will print.

Student: Okay.

Consultant: Sometimes people print things by mistake so we end up wasting a lot of paper. We're hoping that with this new system, this won't happen as much. Somebody might click print by mistake, but they're not going to get up and walk to the printing station by mistake, too.

Student: I see. Thanks.

Consultant: No problem. You'll also see your printing allotment at the station so you'll know how many pages you've got left for this term.

Student: Oh, good. Last time my roommate ran out and had to pay for printing.

Consultant: Yeah, it's an issue. I couldn't help but notice you're printing an application for the greenhouse?

Student: Yeah, an internship through the biology department.

Consultant: Oh, are you majoring in biology?

Student: Engineering, actually. This internship is not really related to my studies but I found it interesting and it's good to branch out, going about new things in different areas.

Consultant: Oh, okay. I ask because I got a friend, someone I graduated with who works in the greenhouse. He says it's a great place to work.

Student: Cool! Is your friend involved in the summer youth program at all? That's what the internship is for. I hope he runs that program. I think a lot of people will apply to this internship. It will be great to know somebody on the inside.

Consultant: I don't know exactly what he does there. I didn't even know that there was a youth program.

Student: Oh, I heard about it on the radio. The participants were going to plant some grasses and flowers and stuff for the new green roofs on campus.

Consultant: Green roof?

Student: Yeah, they're basically gardens on the top of buildings.

Consultant: Why? So students can study plant growth or something?

Student: That's not what they said on the radio. They said that green roofs can lower the temperature inside the building so you don't have to spend as much on air conditioning.

Consultant: Oh, that's a good idea.

Student: Yeah, and also in the city storm water runoff. You know, rainwater that runs into sewers and local lakes and rivers? This runoff contaminant picks up a lot of pollution from the pavement. Green roofs absorb some of that rain, which reduces runoff which in turn helps the water quality.

答案

1. D 2. C 3. B 4. B 5. AD

文章大意

女生因为打印不出东西去找男生，男生告诉她需要再去 station 选择文档，就可以打印了。男生询问女生的专业，女生回答是工程专业的。女生询问男生的朋友是不是负责一个绿化项目的，男生表示不知情，女生说她听说这个项目是让参与者在屋顶上种花种草的，以吸收雨水，防止雨水携带着污染物进入排水系统。

C9

题目

1. Why does the woman go to the information desk?
A. The new computer catalogue has no listing for a book she needs.
B. She wants to report a flaw with the new computer system.
C. She wants to know when a book she needs will be returned to the library.
D. She wants help locating a book she found in the computer system.

2. What did the woman not understand about the results of her computer search?
A. She did not realize that she had entered some incorrect keywords.
B. She misunderstood the information the computer gave about the book's status.
C. She did not understand that the results included titles of both journals and books.
D. She mistakenly thought the book she found was about an island off the coast of Ireland.

3. What does the man tell the woman about the book she wants?
A. It is probably in a box outside the library where students drop off books.
B. It is probably in the area inside the library where returned books are temporarily held.
C. It is probably on a different shelf than the computer record indicates.
D. It has probably not been returned to the library yet.

4. What does the woman imply about the information search she ran on the new computer system?
A. She searched only for journal articles.
B. It gave her an idea about how to expand her research topic.
C. Much of the information she obtained was not useful.
D. The search provided no information about books on the volcano she is interested in.

5. What does the man imply about the new computer search system at the library?
A. It still has some problems that need to be fixed.
B. Its search function takes a long time.
C. It is relatively easy to use compared with the old system.
D. It cannot be used to search for journal articles.

听力文本

Narrator: *Listen to a conversation at the information desk in the library.*

Employee: Hi, can I help you?

Student: Yeah, I was looking for a book and according to the catalogue on the computer system, it's here in the library, but it's not on the shelf where it's supposed to be.

Employee: Okay. You mean you found out where the book was supposed to be?

Student: Yeah, and I checked the exact shelf.

Employee: Okay. I mean the reason I'm asking is we have a new computer system. Sometimes people get confused by it. But yeah, sometimes things just get put back in the wrong place. Or sometimes when you looked through the computer for the book, did you notice the box on the screen that says "status" on top?

Student: Yes.

Employee: Okay. Do you remember what it said in the status box?

Student: Sure, it said returned.

Employee: Okay. That means we just got the book back and haven't had a chance to reshelf it yet. Otherwise it would say "on the shelf". It's probably still sitting on the librarian's desk. If it can wait, come back tomorrow. It should be on the shelf by then.

Student: Okay. Well, I kind of want to get started today. I'm doing research on a project for my geology class on volcanoes and one of the volcanoes I want to write about is White Island.

Employee: White Island? That's an island off the coast of Ireland. There are no volcanoes there, are there?

Student: Actually, it gets a bit confusing because there are a bunch of places called White Island. So when I did searches on the library's computer, I got entries on the White Island off the coast of Ireland and for some other places. But the one I'm looking for is in New Zealand and I couldn't find anything on it except for the one book that's missing from the shelf.

Employee: So White Island is the name of the volcano you're studying or the name of the island where there is a volcano?

Student: Both, actually. It's a volcanic island that's made up of just a volcano.

Employee: Okay. Do you need a book or can you use a journal article?

Student: Any information would be great. All I found was that missing book. I didn't find any articles at all.

Employee: Okay. The reason you may have missed our journal articles is because of the new search system I mentioned. It's really new and at the moment if you want to search for articles, you cannot just type the topic you're searching for but you also have to type in the word "journal" at the end. It's not ideal and it's something that should be fixed soon. But for now, I would recommend doing another search. This time include the word "journal" as a keyword.

Student: Oh, I see.

Employee: So when you do your search, type in "volcano", "White Island", "New Zealand", and "journal" as keywords. That should give you some useful articles.

Student: Thanks for the tip.

答案

1. D 2. B 3. B 4. C 5. A

文章大意

女生去求助男生，说有一本书她在电脑上搜到了，但是对应的架子上面并没有。男生说那是因为书确实还回来了，但是还没有放到架子上，让女生明天来。女生表示比较着急，而且也没有搜到别的相关的材料。男生指导女生如何使用正确的关键词进行搜索。

C10

题目

1. Why does the student go to the housing office?
A. To find out which number he received in the housing lottery
B. To improve his chances of getting a good dorm room next year
C. To complain about an employee he spoke with earlier
D. To see if any students are looking for a roommate for next year

2. What situation is the student trying to avoid for next year?
A. Sharing a room with students who are not his friends
B. Sharing a room with more than one person
C. Living in a small dormitory room
D. Living in an apartment off campus

3. What does the student say about his roommate, Gerald?
Click on 2 answers.
A. Gerald is not willing to share a room with him again.
B. Gerald drew a good lottery number.
C. Gerald will have more than one roommate next year.
D. Gerald has decided not to live in a dormitory next year.

4. What does the man conclude from his conversation with the housing representative?
A. He needs to find a potential roommate with a good lottery number.
B. He needs to get information about off-campus housing.
C. He should exchange his lottery number with another student.
D. He should put his name on a waiting list for housing.

5. What does the woman mean when she says this:
A. She is not sure the student knows where to go to sign up.
B. She is confused about what the student wants to know.
C. She thinks that the student has been given incorrect information.
D. She thinks the student should choose his room now.

听力文本

Narrator: *Listen to a conversation between a student and a university housing representative.*

Student: Hi, I was here this morning. I spoke to your assistant to Laura, I guess it is. She couldn’ t help me so…

Representative: So you thought you would try your luck with me? If Laura can't help you, I'm not sure I can, but I can try. What seems to be the problem?

Student: Well, I made out really badly in the lottery for dorm rooms next year.

Representative: I'm sorry to hear that, but that's just the luck of the draw, you know? You get a random number and that determines when it's your turn you to choose a dorm room. It's not a perfect system, but at least it's impartial.

Student: Well, here's the situation. It's not just a bad number. It's a terrible number. I'm almost at the bottom of the list. I think I get to pick a room at the end of the third day when like the smallest darkest rooms will be the only ones left. You know, like those ones in Parker Hall? They're really too small. I really don't want to live in one of those.

Representative: Yeah, those are usually the last to go.

Student: But, my roommate, and I talked to him about this and he's totally cool with it, he drew a really great number.

Representative: Okay. You can still room with him. All you have to do is show up with him when it's his turn to choose, and sign up to share a double room.

Student: Oh, I didn't know you could do that. I assumed...

Representative: Isn't that where you were going?

Student: I assumed. Actually, no but that may not be a bad idea. Actually my idea was that, well, my roommate...

Representative: The one who would probably get a very nice room?

Student: Right. His name is Gerald. Anyway, Gerald was lucky, you know, got this great number but then he changed his mind about the dorm and now he's thinking about moving completely off campus next year. He's going to rent an apartment, so he said I could have his number, no problem.

Representative: No, sorry. It doesn't work that way. I'm sure Laura explained it to you. When people don't show up to select the dorm room when their turn comes up, we just move on to the next person. We can't give their number to someone else.

Student: Alright. But now I guess I'm thinking, maybe, what about the other thing you mentioned? Like rooming with someone who got a good number?

Representative: That you can do. Most people go for single rooms, but you know, some people like roommates. Do you have someone in mind?

Student: Not yet. I mean, no one immediately comes to mind, but I think I'm going to start asking around right away. And this is for double rooms only?

Representative: Oh no, you can even go for a triple, or a quad. All you need is one guy with a really good number, and the rest you can tag along.

答案

1. B 2. C 3. BD 4. A 5. B

文章大意

男生的学校按照抽签的号码先后挑选宿舍，男生自己的号码很靠后，但是他舍友的很靠前，男生想用自己舍友的号码来选宿舍，女生说不可以随便把号码给别人。但女生又说，男生可以去找号码很好的其他人，和他们拼一个宿舍。

Lecture

L1

题目

1. What does the professor mainly discuss?
A. Hypotheses about why certain behaviors have developed in juvenile fish
B. Possible explanations for a fish-grouping behavior
C. Predator-prey relationships among various marine organisms
D. Evidence that grouping behaviors are more beneficial for adult fish than for juvenile fish

2. What type of evidence does the professor refer to in support of the meeting-point hypothesis?
A. The large number of species of fish that form schools
B. The types of floating objects under which tuna aggregate
C. The percentage of fish species that aggregate under floating objects
D. The size of schools formed by tuna that aggregate under floating objects

3. What is the professor's opinion of the paper written by researchers in Spain?
A. Its challenge to the meeting-point hypothesis is convincing.
B. It raises more questions about fish aggregation than it answers.
C. It effectively shows that the shelter-from-predators hypothesis is not true for most fish species.
D. It supports the food-supply hypothesis.

4. Why does the professor discuss fish coloration?
A. To support the shelter-from-predators hypothesis
B. To point out a difference between tuna and other fish species
C. To emphasize the connection between a fish's diet and its coloration
D. To explain why not all fish species aggregate under floating algae

5. Why does the professor discuss ocean currents?
A. To explain one way in which fish form schools
B. To explain one way in which floating debris aids fish in obtaining food
C. To explain why some fish species do not need to aggregate
D. To indicate where commercial fishers often place fish-aggregating devices

6、What points about tuna does the professor emphasize when she discusses artificial fish-aggregating devices, or FADs
Click on 2 answers.
A. That tuna continue to aggregate as adults

B. That tuna rely on FADs for most of their food
C. That FADs are usually placed in areas where juvenile tuna do not live
D. That juvenile tuna are seldom found in coastal waters

听力文本

Narrator: *Listen to part of a lecture in a marine biology class.*

Lecturer: Another group behavior amongst fish that might be related to schooling, at least for some species, is something we see with a lot of ocean dwelling fish. It's an attraction to floating objects, a phenomenon we call fish aggregation behavior. Aggregation behavior has been documented in more than three hundred fish species. Hundreds, or even thousands of individuals, will congregate under a floating log, or tree branches, or drifting algae, any chunk of debris really, whether naturally occurring or human made. It's as if floating objects act as magnets for fish. The fish are attracted to them and just hang out there for extended periods. The behavior must serve some purpose, but what? Any ideas? Paul?

Paul: Maybe the objects provide cover from predators? Sort of hide them from birds flying overhead?

Student 2: Or... could they contain food, like organisms that grow on the floating debris, like uh, floating buffet tables for fish?

Lecturer: Both seem plausible hypotheses. Anyone else? Okay. Well, before we get to those, let's start with one of the first hypotheses researchers ever considered, which was developed on the basis of the behavior of tuna, and that's the moving point hypothesis. This hypothesis holds that tuna aggregate at the prelude to forming schools. Isolated individuals meet up, and when there's enough, they swim off in a close-knit group, a school. As you know, schooling diminishes a fish's chance of being singled out by a predator, and it helps fish detect food

and find a mate, among other things. Now, tuna do form schools after congregating under floating objects, but what really supports the hypothesis is evidence of schools of tuna that form beneath floating objects seem to be larger than schools formed elsewhere from free-swimming tuna, so there's a correlation between school size and aggregation.

But, the meeting point hypothesis for other species has been challenged recently by a group of researchers in Spain. And their argument is quite strong, I'd say. They point out that more than eighty percent of fish found aggregating around floating structures are juveniles. Schools, on the other hand, consist mainly of adult fish. So, aside from a few species like tuna, very few aggregating fish end up forming into schools. The data shows that the moving point hypothesis is pretty limited. Yes, Paul?

Paul: So, what about the other hypotheses, is there evidence for those?

Lecturer: Okay, the shelter from predators and food supply hypotheses. Well, juveniles of all species are more vulnerable to predators than adults are. And in many species, fish develop coloration during juvenile stages that mimic the floating object they're attracted to, like some species have dark bars on yellow backgrounds which helps them blend in with drifting algae. In most cases, when these juveniles become adults, their coloration changes and they can swim away. They lose that particular camouflage along with their instinct to aggregate, so floating debris does seem to function as protection from predators for the juveniles of many species.

As for food supply, floating objects really help with this, because they drift. And as they drift, they become havens

for tiny invertebrates, providing a ready meal for juvenile fish as they drift along an ocean current with the object. Now, ocean currents tend to converge at various points, and plankton, which juveniles also eat, also tend to collect in pockets at these locations. So, for aggregating juveniles, going with the flow, so to speak, enables their survival because nourishment can be difficult to find in the open ocean. So, for most fish, aggregation seems to provide some benefit related to food supply or predation, particularly for juveniles.

For tuna, the meeting point hypothesis seems like a better explanation, because it's not just juvenile tuna that aggregate. The adults do it, too. Their aggregation behavior does not go away as the fish mature. And this fact, by the way, is not lost on the commercial fishing industry. Commercial tuna fishers regularly deploy artificial floating objects known as fish aggregating devices, or F-A-Ds. The size, color, and shape of the F-A-D don't seem to matter, or whether they're free-floating or anchored like a buoy. F-A-Ds are so effective, that almost two-thirds of tuna catches are made at F-A-D sites.

Speaker 2: They catch juveniles, too?

Lecturer: Well, tuna fishers are interested in adult fish, not juveniles, so they tend to be careful about where they place their F-A-Ds. Like, they usually don't put them near coasts, where most juvenile tuna live.

答案

1. B 2. D 3. A 4. A 5. B 6. AC

文章大意

第一段：教授开篇提到本节课要讲的是鱼类群体行为是对漂浮物的偏爱。不管是人造的，还是自然物，只要是飘着的，就会有鱼喜欢在下面呆着。

第二段：教授问这是为什么？Paul 猜测可能是为了躲避捕猎者，比如鸟。另一个学生猜可能是漂浮物上长有食物。教授说这些理论都能说得通，并提到一个基于吞拿鱼行为而解释的“动点假说”。这个假说认为，单个吞拿鱼在聚成鱼群之前，会聚集在一起，当数量足够了，会像一个组织严密的群体行动-一个鱼群。整群行动可以降低个体被吃的概率，也能提高找到食物、伴侣的几率。教授提到吞拿鱼也会在漂浮物下面聚集，但是支持“动点假说”的证据是在漂浮物下面的吞拿鱼群会比其它地方的大一些。

第三段： 但是“汇点假说”也被质疑：在漂浮物下聚集的鱼群中，80%是青少年。所以，除了吞拿鱼等少数鱼种外，很少能形成一个有组织的鱼群。教授总结，这个理论还有局限。

第四段：学生提问，那其余的假说，有没有理论支持？教授说，青少年躲在漂浮物下面，确实比成年鱼更容易遭到攻击。而且，很多鱼种在青少年时期，会长出颜色来模仿漂浮物。教授举例，一些喜欢水藻的鱼种，会长出黄底黑条纹。而当它们成年，身体颜色会变，它们就游开了。所以，这个解释说得通。

第五段：教授提到漂浮物确实可以对鱼提供食物，当漂浮物在水里面飘时，会吸引很多无脊椎动物聚集，而无脊椎动物就是青少年鱼的食物。另外，漂浮物会随着洋流移动，而洋流会汇集，这会带来青年时喜欢的浮游生物。教授总结，所以

跟着漂浮物走，对青少年的鱼来说，能提供食物跟保护。

第六段：对于吞拿鱼来说，更能说得通的是“汇点假说”，因为不仅是青少年聚集，成年鱼也会聚集。很多商业公司也利用了这一点。商业捕捞公司会故意放置人工漂浮物（Fish Aggregating Devices， FADs）。FAD 的大小、颜色、形状无所谓，哪怕就是一个浮标。FAD 方法很有效，这种方法捕捞的吞拿鱼占了总捕捞量的 2/3。

第七段：学生提问，商业捕捞公司也会捕捉青少年的鱼群吗？教授回答，捕鱼者们想要的是成年鱼，而不是青少年。所以他们会很注意在哪里投放 FAD，一般不放在沿海等青少年聚集地。

L2

题目

1. What is the discussion mainly about?
A. Effects of climate change on migratory animals
B. A strategy for protecting endangered species
C. Threats to aquatic habitats in the Pyrenees mountains
D. Ways to control the spread of invasive species

2. Why does a student mention the introduction of shrimp into a lake in Montana?
A. To point out a possible danger of assisted migration
B. To explain why certain species are good candidates for assisted migration
C. To suggest that assisted migration can benefit several species at the same time
D. To give an example of a new assisted migration program that is being considered

3. According to the professor, how did climate change affect the two butterfly species that she discusses?
A. It dried up the water supply in their habitat.
B. It made them vulnerable to predators.
C. It caused a decrease in their food supply.
D. It made it hard for them to reproduce.

4. What does the professor imply about the biological costs of relocating wildlife?
A. The biological costs can be eliminated with careful planning.
B. The benefits almost always outweigh the biological costs.
C. It may be difficult for scientists to anticipate all of the biological costs.
D. There have been minimal biological costs involved to date.

5. What are two reasons that the Iberian desman may be a good candidate for assisted migration to the Alps, Scotland, or Scandinavia?
Click on 2 answers.
A. Its current predators inhabit those areas.
B. It would be the only species of its kind in those areas.
C. It is unlikely to spread beyond those areas.
D. It would attract beneficial species to those areas.

6. What is the professor's opinion about the proposal to use assisted migration to save the Iberian desman
A. She is surprised that it is controversial and believes that it will be beneficial if closely followed.
B. She thinks that it will benefit the Iberian desman but will harm other species.
C. She appreciates that the researchers will proceed with it slowly.
D. She believes that efforts should have been made to rescue the Iberian desman

sooner.

听力文本

Narrator: *Listen to part of a lecture in an ecology class.*

Professor: So we've been looking at threats to the survival of many species of plants and animals all over the world. Two threats that we've identified are climate change and habitat destruction. So now the question is what can be done to save these species? Stephanie?

Stephanie: Well, we can stop burning fossil fuels. You know, use solar or wind energy.

Male: I heard about the seed banks all over the world. Scientists are collecting seeds from all kinds of plants so they don't become extinct and they're also breeding threatened animals. Of course, that probably means in zoos.

Professor: Okay. These are definitely approaches being used. But there's another alternative that more and more conservationists and ecologists are looking at. It's called assisted migration. Assisted migration is the process of physically moving an entire species from a habitat where they are endangered to a new habitat that's more hospitable.

Stephanie: But you know, that reminds me that species of shrimp you told us about before, the one that wildlife managers introduced into a lake in Montana because they thought it would be suitable food for some of the lake's fish? But the shrimp became invasive. It ended up competing with the fish for its food and disrupting the entire lake's food web.

Professor: Yes, and sometimes the species will occupy a wider area than intended. And it's because of risks like these that this is a very controversial idea.

Male: Has it ever been done successfully?

Professor: It seems so. In the late 1990s, with populations of two butterfly species in England, climate data had shown that the butterfly's habitat was experiencing warmer temperatures, which was directly affecting their ability to reproduce so conservationists used computer climate models to locate areas that could provide a more suitable habitat. First, one species was moved about 35 kilometers north, and the following year, the other species was moved about 65 kilometers north. And for over 20 years, both species had been followed very closely. So far anyway, we haven't seen any negative consequences.

Stephanie: Wow. But how do you decide which species to move and where to move them?

Professor: Well, researchers have come up with a set of criteria. First of all, only species that are at a high risk of extinction because of climate change, or habitat destruction are even considered. And obviously there'd have to be a suitable place to reestablish the species. But mostly importantly, the benefits of relocation would have to outweigh the biological cost. However, the problem with this criterion is that we don't see the biological costs until the damage has been done, as in the case of the shrimp.

So okay, let's see how well one animal, the Iberian desman, fits these criteria. The Iberian desman is a semi-aquatic animal that lives among fast-flowing streams in the Pyrenees Mountains of southern France and northern Spain. Researchers considered the Iberian desman a good candidate for relocation for two reasons. First, it's found in only in a very limited area. This suggests that for whatever reason, they can't easily migrate to a new habitat on their own. Well, that's a problem because the streams and rivers that the Iberian

desman inhabits are becoming polluted. Plus, there's the additional problem of an increasing number of hydro-electric plants in that area. This is leading to a fragmentation of the Iberian desman's habitat. So, the destruction of their habitat is clearly putting them at risk.

Now, add to that the predicted effects of climate change. Higher temperatures, lower rainfall, and well, assisted migration of the Iberian desman becomes an attractive prospect for researchers. In fact, they've identified several areas in Europe: in the Alps, in Scotland, and in Scandinavia that could be suitable for these animals.

Stephanie: But what about the risks?

Professor: Well, researchers are considering the risks. But the Iberian desman shares its current habitat with the same competitors that are found in these new habitats. Not only that the animals that currently prey on the Iberian desman also inhabit the new areas. And the fact that the species has never show signs of expanding its current range, all these factors suggest that it might not become invasive and accept the natural balance of things.

Male: So, has this assisted migration of this animal... They're going to do it?

Professor: For now, it's just a proposal. As I said, assisted migration is still a controversial idea and even the researchers who are behind the proposal are being very cautious, and with good reason. I mean, so far there's only been one feasibility study.

答案

1. B 2. A 3. D 4. C 5. AC 6. C

文章大意

第一段： 教授开篇提到两个威胁很多动植物生存的因素：气候变化、栖息地的毁坏，并问 Stephanie，怎么做才能拯救这些物种？Stephanie 回答说，可以停止化石染料的使用，用太阳能跟风能。男同学补充，世界上有很多“种子银行”，把种子收起来，不至于绝种。还有人在哺育濒临灭绝的动物。

第二段： 教授说，都是目前在用的方法，但他想介绍另一个越来越受关注的方法：协助迁徙（assisted migration）。教授说“协助迁徙”是将整个物种从受威胁的地方迁徙到一个新的、更适合居住的新环境的方法。Stephanie 提问，上次不还讲了种虾吗？被野生动物管理员引进到蒙大拿州的一个湖里面，本以为这种虾是湖里面鱼的好食物，但没想到虾进来后跟鱼抢食物吃，还搅乱了整个湖的食物网。教授说，没错，另外就是物种有时候还会占据比我们预料还大的地区。正是由于这些风险存在，所以这种方法才有争议

第三段：男同学问，有成功的案例吗？教授说有的。上世纪 90 年代，英格兰的 2 种蝴蝶的案例就是成功的。教授说，气候数据表明，蝴蝶的栖息地当时正经受高温，这之间影响力它们的繁殖。所以，环保人士就用电能气候模型找到另一个能让这些蝴蝶生存的地方。起初，一种蝴蝶往北挪了 35km，第二年，另一种蝴蝶往北挪了 65km。随后的 20 年里，我们密切跟踪了这些蝴蝶，知道目前位置，并未发现有什么消极影响。

第四段：Stephanie 问，那怎么决定哪种该迁徙，又怎么判断该往哪儿迁徙呢？教授说，研究人员提出一组标准。首先、被迁徙的物种仅能是由于气候变化、栖息地毁坏导致的高危物种。但是最关键的是迁徙后的“优”必须要超过生物成本

的“劣”。教授还说，但是问题在于这个成本只有在破坏产生了才看得到。

第五段：教授举例 Iberian desman。他说这个物种是一个半水生动物，生活在比利牛斯山（Pyrenees Mountains）的急流中。研究人员认为，这个物种很适合迁徙。原因有 2:

a、 Iberian desman 仅在有限的地区里能发现。这意味着，靠它们自己无法迁徙到一个新地区，而 Iberian desman 生活的溪流正在被污染。另外，那个地区有越来越多的水力发电站，这导致了 Iberian desman 栖息地的碎片化。

b、 气候变化带来结果：高温、低降雨量。

教授说，综上，很多人想用“协助迁徙”帮助 Iberian desman 找到新的栖息地。甚至有人认为欧洲的一些地区很适合：Alps、Scotland、Scandinavia 等

第六段：Stephanie 问，那风险呢？教授说 Iberian desman 现在生活地方的竞争对手、天敌，在上面提到的那些候补地区里也找到了。另外，Iberian desman 从没有扩张领地的迹象。所以，这些都表明，Iberian desman 的迁徙不会破坏生态平衡。

第七段：男学生提问，那就决定做咯？教授说目前仅仅是提议阶段。但是这个方法很有争议，即便是这个方案的提出者对此也很谨慎。教授说这么谨慎也是有原因的，因为目前仅仅一个成功的案例。

L3

题目

1. What is the lecture mainly about?
A. The processes involved in coral bleaching and its effects
B. The reasons why coral bleaching is increasing in frequency
C. The methods by which corals create reef structures and reproduce
D. The reasons why different species of coral respond differently to bleaching

2. According to the professor, how do the zooxanthellae benefit coral?
A. They produce food for the coral.
B. They attract food sources to the reef.
C. They draw the coral to shallow water where it thrives.
D. They protect the coral from predators.

3. Why does the professor discuss trade-off theory?
A. To emphasize the mutual benefits for coral and zooxanthellae
B. To illustrate why coral that recover from bleaching can suffer lasting effects
C. To explain changes that occur in corals that are resistant to high temperatures
D. To clarify why bleaching events are worse in some places than in others

4. Aside from overall decline, what change in reefs does the professor predict will occur if frequent bleaching continues?
A. Coral populations will shift to occupy different locations on reefs.
B. Branching forms of coral will become less resistant to bleaching.
C. Reefs will contain higher numbers of corals with dome-like forms.
D. Additional types of zooxanthellae will appear in reef-building corals.

5. What does the professor imply when she says this:
A. She disagrees with a theory of coral bleaching.
B. Students should be able to explain the problems associated with photosynthesis.
C. Some aspects of the coral bleaching process are not yet understood.
D. Increased photosynthesis causes a problem that is not easily apparent.

听力文本

Narrator: *Listen to part of a lecture in a marine biology class.*

Professor: Coral reefs are important marine ecosystems. These colorful undersea structures are actually built from secretions by coral animals. Recently though, reefs have been threatened by the problem of coral bleaching. To

understand what coral bleaching is, you need to first understand the ecology of the corals themselves.

So let's start with the coral animals, which is tiny with a single body cavity. Most reef-building corals, corals that actually form structures, have a symbiotic relationship with a type of algae called zooxanthellae. Zooxanthellae live in the tissue of the coral in which we might call the coral's gut. And this relationship between zooxanthellae and the coral is a mutualistic symbiosis which means that both organisms benefit from it. The zooxanthellae provide the coral with foods and this food comes from the photosynthesis that the zooxanthellae undergo.

Student: Excuse me, but I don't understand. These algae live inside the coral which lives in the water. So where do they get the light for photosynthesis?

Professor: Well, most coral animals have transparent bodies and one of the requirements for coral is clear, shallow water so the zooxanthellae utilize the light that shine through the water and into the coral's body for photosynthesis. And corals get about 80% of their nutritional needs this way. So corals and zooxanthellae grow much faster and formation of coral structures is also going to occur much faster because of this. In fact, corals without zooxanthellae cannot form new structures.

Now, there is another effect of the corals having zooxanthellae within them. This one is not actually a benefit but more of a side effect. The zooxanthellae give corals the wide variety of colors that we're used to seeing on coral reefs. As I've said, coral animal is actually fairly translucent; the colors we see come from the zooxanthellae.

Okay, so the corals get nutrition to build reefs. What do the zooxanthellae get out of this relationship? They get

some nutrients themselves from coral waste. Another benefit is that they' re protective. Nothing can eat these tiny algae while they' re living inside the coral.

So now that we understand what' s going on inside the coral animal, we can talk about coral bleaching which is a great sound of this symbiosis. A variety of environmental conditions can lead to coral bleaching. But the most common are high temperatures and high levels of light. If you think about it, high temperatures and high light levels are actually really good for photosynthesis, right? More photosynthesis, more food. Why should that be a problem? Well, when photosynthesis occurs too rapidly you get a buildup of what are called oxygen radicals within the coral. Now, oxygen radicals are unstable oxygen molecules and they bounce around inside the coral, causing damage to both coral and zooxanthellae. In reaction, the corals expel the zooxanthellae. Once that happens, what you see a white or bleached looking coral because the zooxanthellae have left. If the high temperatures and the high light levels don' t persist for very long, the coral can usually be repopulated with zooxanthellae and go back to normal functioning. It' s when it' s taken to the extremes that it' s a problem. If the corals can' t repopulate the zooxanthellae within about a month they' re going to starve and die. But even if the coral does recover eventually, there can be some lasting effects according to something called tradeoff theory. Tradeoff theory suggest that organisms put different amounts of resources into different processes depending on how stressed they are. For corals in the aftermath of bleaching, all of their resources are going to go into recovering. They' re not going to put any energy into growth and they' re definitely not going to put any energy into reproduction.

Coral bleaching events are increasing in frequency. Since 1979, recent fits of what we call mass bleaching events. In

fact, there's no part of the world where bleaching has not been reported during the past few decades. So what's going to happen if bleaching continues at such a high frequency? We're definitely going to see a decline in coral overall. But we might also see some interesting changes in the species of corals populating reefs. For example, some coral species seem to be more resistant to bleaching than others. Corals that have a rounded, dome-like form, for example, are less prone to bleaching than blanching corals. So we're likely to see a shift to the resistant types of corals.

答案

1. A 2. A 3. B 4. C 5. D

文章大意

第一段： 教授开篇提到珊瑚礁是很重要的海洋生态系统，珊瑚礁由珊瑚动物的分泌物建成。但是最近珊瑚礁被白化所威胁。教授说在理解珊瑚白化之前，要先讲一下珊瑚生态系统。

第二段：教授从珊瑚动物开始说，珊瑚动物体型很小，有单一的身体凹坑。绝大多数形成结构的珊瑚，跟 zooxanthellae（一种藻类）有一个共生关系。后者生活在前者的肠道里，两者之间的互助关系，这意味着双方都获益：zooxanthellae 通过自身光合作用为珊瑚提供食物。

第三段：学生提问，zooxanthellae 不是或者珊瑚肠道里吗？怎么还能光合作用？教授说，绝大多数珊瑚动物身体透明，而又处在浅水，所以 zooxanthellae 能光合作用。珊瑚的 80%的食物来源于此。所以珊瑚跟 zooxanthellae 的生长会更快，导致珊瑚结构的发展更快。教授说如果没有 zooxanthellae，珊瑚并不能形成新结

构。珊瑚体内又 zooxanthellae，还有一个副作用：各种各样的颜色。而珊瑚本身是透明的，这些颜色其实是 zooxanthellae。那 zooxanthellae 又能从这个共生关系中得到啥好处？答案是从珊瑚的排泄物中得到养分，此外还有能得到珊瑚的保护—谁也吃不到它。

第四段：教授说接下来讲珊瑚白化。引起白化的因素很多，但事实最常见的是高温、光线。教授说其实细想一下，高温、光线对光合作用都是有利的，更多光合作用不就有更多食物了吗？那为啥又会是一个问题呢？教授解释说，光合作用太频繁的话，珊瑚体内会出现氧自由基（oxygen radicals）。氧自由基是不稳定的氧分子，它们在珊瑚体内乱蹦哒，破坏了珊瑚跟 zooxanthellae。相应的，珊瑚会驱赶 zooxanthellae，随后你就会看到一片白化的珊瑚，因为 zooxanthellae 离开了。如果高温跟高亮度持续的时间不长，双方会冰释前嫌，继续相依为命。但是当情况比较极端，那就有问题了。如果珊瑚在 1 个月内无法与 zooxanthellae 重新结合，珊瑚就会饿死。

第五段：但即使能重新恢复关系，“Tradeoff Theory”认为，生物体会依据自身的压力水平，为不同的进程分配不同数量的资源，白化后的珊瑚，自身所有的资源都放在恢复上，不会在生长上投入多少资源，更不会在繁育上投入了。

第六段：教授说，珊瑚的白化正变得越来越频繁，自 1979 以来就出现了几次大规模的白化。实际上，过去几十年，地球上没有一处没出现过白化。那么这么高频的白化会带来什么后果？教授说，肯定的是珊瑚数量整体下降。也可能会看到珊瑚后代的变化。比如，某些珊瑚比较能抗白化，如某些圆的、穹顶形状的，所以将来的珊瑚可能会更抗白化。

L4

题目

1. What is the lecture mainly about?
A. A method that is used to determine an animal's diet
B. How scientists determine where migratory birds stop to feed
C. The different forms of carbon that can be found in animals
D. How migratory birds find different types of food at stopover sites

2. How did researchers find out what a bird ate at different times during migration?
A. By taking samples of the bird's breath at different places on the migration route
B. By having the bird wear a device that records what it eats during its journey
C. By taking samples of the bird's breath and several of its body tissues
D. By observing bird feeders along the migration route

3. According to the professor, what are two possible reasons that white-throated sparrows eat corn on Block Island?
Click on 2 answers.
A. The birds normally eat corn throughout the year.
B. The berries that they usually eat are not available.
C. The corn provides good nutrition for long flights.
D. The birds can easily locate corn growing on farms.

4. According to the professor, what might be the practical application of studying the diet of white-throated sparrows?
A. It will help Block Island farmers protect their crops.
B. New methods of determining changes in diet can be developed.
C. Feeding white-throated sparrows will prevent them from migrating in the winter.
D. Migrating white-throated sparrows will be provided with the most appropriate diet.

5. What do biologists hope to find out by using breath collectors on bears?
A. Whether the diet of bears changes when they are nursing
B. How the amount of meat in the diet of bears affects their health
C. How the bears' ability to nurse their young varies
D. Whether the diet of bears affects the carbon signature in their blood

6. Why does the professor say this?

A. To indicate that she would enjoy doing this type of research with bears
B. To indicate that this type of research is easier to do with birds than with bears
C. To encourage students to volunteer for research projects
D. To encourage students to express their opinions

听力文本

Narrator: *Listen to part of a lecture in a biology class.*

Professor: Okay. So we spent a lot of time this past week talking about migratory birds and how they survive their long journey. Well, there's some interesting research that's being done to determine what certain migratory birds eat during their journey, and more importantly, what they eat at different times during migration. And this research involves using breath collector, tiny breath collectors. Here's how it works. It consists of a small mass connected to a small balloon filled with oxygen. The mask is fitted over the bird's beak and the bird inhales the oxygen from the balloon, and then when it exhales, it replaces the oxygen with carbon dioxide, so then researchers analyze the carbon dioxide for the carbon signature of the food the bird ate recently. Now the carbon signature that the researchers measure is the ratio of carbon 12 to carbon 13, two different forms of carbon in the bird's breath. And the ratio will vary depending on what the bird ate.

Male: You said they could determine what a bird at different times during migration. How do they do that?

Professor: Well, good question. What happens is that over a period of time, as the bird digests its food, and the body absorb the nutrient, the carbon signature move from the bird's breath, to its blood, and then to its feathers. The carbon signature in the breath tells us what the bird ate earlier that day. The signature in the blood plasma tells us what it ate two or three days before and the signature in the red blood cells tells us what it ate two or three weeks before, and finally the carbon signature in the bird's feather tells us what it ate a month or so ago. So scientists can basically create a dietary record by analyzing a bird's breath along with a carbon signature in different tissues from the same bird. Okay, so what if

the carbon signature in a bird's feather is different than the carbon signature in its breath?

Male: That would tell us that the bird changed its diet over the course of its migrating, wouldn't it?

Professor: Yes, it would. In fact, that's what tests revealed about white-throated sparrows on Block Island. We learned that during the course of their migration, white-throated sparrows switched their diet from berries to corn when at a stopover sight on Block Island. Now, this indicates that they're eating at bird feeder because that's an ingredient in bird feed and there's no corn grown on this particular island. So researchers know that birds are using bird feeder, but they don't know why. Is it because there's not enough of the food they usually eat available to them? Or is it because they prefer corn? So we need to know, do the sparrows usually switch their diet when they migrate? Is this a more nutritious diet for the migration period? Or are they just getting by on corn, when what they really need is berries? This raises the question about the importance of feeders to the birds as they migrate. If we can understand the sparrow's diet, we can provide them with proper nutrition while they are migrating. On top of that, Block Island used to have a lot of farming, but now residents rely on tourism. Tourists often come to see the flocks of migrating birds.

Female: So when you talk about proper nutrition for the sparrows, it could be corn. It could be berries.

Professor: Right. That's what needs further research.

Male: So, what about other animals? Could breath collectors be used to find out about their diet?

Professor: Yes. Of course, you need a different size mask. This research is not only significant to biologists studying

birds. For instance, biologists are studying the eating habits of bears to find out if they eat different foods when they' re nursing than when they' re not nursing because they want to know whether nursing bears are more carnivorous than non-nursing bears. How would you like to be the biologist who puts the mask on the bear? Of course, the bears are sedated before that' s done, so it' s not as risky as it might seem. Anyway, similar research is being conducted all over the world since the information it provides could be very useful to conservation efforts.

答案

1. A 2. C 3. BC 4. D 5. A 6. B

文章大意

第一段：教授开篇之前讲到候鸟以及它们如何在长途飞行中存活。有人去研究某些候鸟在途中会吃什么，更重要的是，在不同的时期会吃什么。这个研究用到了呼吸收集器。呼吸收集器由一个装满氧气的小气球连接到一个小面罩，面罩罩在鸟喙上，鸟从气球中吸取氧气，并往里呼出二氧化碳。研究人员从二氧化碳里分析出鸟类最近吃的东西的碳记号。而目前测量的是碳 12 跟碳 13 的比值，这个比会依吃的不同而变化。

第二段：学生提问，怎么测定不同时间段吃了什么？教授回答食物在鸟体内消化吸收后，碳记号会从它的呼吸中转移，先是转到它的血液中，再转到羽毛上。呼吸中的碳记号告诉我们鸟那天吃了什么，血液离子中的碳记号能说明最近两三天吃了啥，血液红细胞中的碳记号则可以记录之前两三周的食物，而羽毛里的碳记号能说明之前一个月左右的情况。据此，科学家们能绘制出鸟的食谱记录。

第三段：教授提问，如果羽毛上的碳记号跟呼吸里的碳记号不匹配，怎么办？学生猜测是不是这样就能知道鸟换了食谱。教授说是的，并举例“白喉麻雀”。“白喉麻雀”在途径 Block Island 时，食物由莓果换成了玉米。这说明，它们在鸟类喂食处进食的，因为只有喂食处里才有玉米，而 Block Island 上没有玉米种植。但是研究人员不确定为什么鸟会从喂食器进食，是因为平常吃的东西不足？还是因为它们喜欢吃玉米？那么，鸟类迁徙时会更换食谱吗？换得食谱能在迁徙途中给他们更多营养吗？或者玉米仅仅是作为莓果的替代品，用来维持温饱？这就使得喂食器显得更重要，如果我们能更好理解“白喉麻雀”的食谱，我们就能为其提供更好营养。此外，Block Island 过去依靠农业，而现在依靠旅游业，因为很多人来这儿看“白喉麻雀”的迁徙。

第四段：女学生提问，莓果跟玉米都有可能给“白喉麻雀”提供营养咯？教授说是的，还需进一步研究。

第五段：男学生提问，那其余动物也能用呼吸收集器吗？教授回答是的，仅需调整大小。教授还总结，这个研究不仅对研究鸟类的生物学家有意义，对研究其它动物也有意义，比如哺乳中的熊是否比非哺乳中的熊更具食肉性。此类研究对动物保护意义非凡。

L5

题目

1. What is the lecture mainly about
A. New hypotheses about dinosaurs resulting from tissue analysis
B. Factors that allow dinosaur bones to be well preserved
C. The role of histology in determining nutritional needs of dinosaurs
D. The identification of some recently discovered dinosaur bones

2. Why does the professor describe the process of petrifaction?
A. To clarify the difference between bone and soft tissue
B. To explain why histology can be used on dinosaur bones
C. To remind students of how long ago dinosaurs lived
D. To describe the origins of some cracks in dinosaur bones

3. What would researchers have concluded if they had found stress-fractures in the skulls of certain dinosaurs
A. That they had been undernourished
B. That they had engaged in head butting behavior
C. That the skull bones were not well preserved
D. That the skull bones were fragile

4. According to the professor, what evidence supported the original hypothesis that Apatosaurus took decades to reach its adult size
Click on 2 answers.
A. Adult bones had many growth rings.
B. Its environment did not support many plants.
C. It was a very large animal.
D. Modern day reptiles grow slowly.

5. Prior to the use of histological analysis, what would researchers have probably concluded upon the discovery of the bones of a small sauropod?
A. The bones belonged to a new species of sauropod.
B. The bones belonged to a dwarf species of dinosaur.
C. The dinosaur's habitat had limited resources.
D. The bones belonged to an immature dinosaur.

6. Why does the professor say this:
A. To suggest a reason that the dinosaur did not survive
B. To find out if the students believe such rapid growth was possible
C. To express her sense of amazement
D. To show how inaccurate researchers were in their original prediction

听力文本

Narrator: *Listen to part of a lecture in a biology class.*

Professor: We have very good ideas about the various shapes and sizes of dinosaurs from studying their petrified bones. But we've had to hypothesize about things like their behaviors and lifespan because much of that kind of information isn't preserved the way bones and teeth are, or so we thought. Now, just to review a second, the dinosaur bones we studied were preserved and turned to stone millions of years ago through the process of petrifaction. Petrifaction is when all of the original biological material gets replaced with minerals without losing its original shape or details. Some petrified dinosaur bones contain almost perfectly preserved microstructures as small as individual cells. And when bones are that well preserved, we can use histology to examine them. Histology is the study of biological tissue. And in this case, histology is being used to study petrified bone tissue. To do that, the petrified bone has to be cut into slices so thin that light can pass through them. Then you can examine them under a microscope. It turns that the preserved microstructures contains a lot of information, including clues to behavior.

In fact, long-standing hypotheses about dinosaur behavior are being proved wrong and new hypotheses about dinosaur behavior are taking their place. For example, there's one dinosaur that we know had a high dome-shaped skull composed of thick bone. Since the 1950s, we thought that with such a thick skull that males probably butted heads just like big-horn sheep do today, probably when competing for mates. But just a couple of years ago, some university researchers in the United States took a close look at the histological findings in several of these skulls to look for evidence of head butting like healed cracks or stress fractures. But the analysis clearly showed that there was no sign of that kind of stress to the

bones. Instead, what they found was small structures that look like they may have actually anchored a crest to the skull.

Female: A crest, maybe like a rooster comb?

Professor: So now paleontologists are wondering what the crest might have been used for. Display? Recognition? But certainly not for head butting.

Now, another long-standing hypothesis was that the really big dinosaurs took decades to reach full size. After all, they hatched some fairly small eggs and they had a lot of growing to do so it' s a fairly logical assumption that it took a long time to reach their giant sizes. Then researchers did a histological examination of Apatosaurus' bones. Apatosaurus was a species of sauropod, a giant plant-eating dinosaur. It had a long neck and a long tail and its full size was about 25 meters long and weighed about 25 tons. Now, the idea that the Apatosaurus grew slowly was based on many observations including its enormous size and the fact that large modern reptiles grow slowly. For example, Apatosaurus has a relatively small mouth and simple feet and the plants that lived at that time were not particularly nutritious. Altogether, it' s not a recipe for fast growth. However, under a microscope, it' s clear that dinosaur bones have growth rings and by counting them like tree rings, paleontologists can infer how many years of bones have grown. And when comparing the growth rings from several specimens of the same species of dinosaur, paleontologists can figure out growth rate for that species. Well surprisingly, that giant Apatosaurus reached its full size in just eight to eleven years. Just eight to eleven years! Can you imagine growing three meters a year? And the only way information like this can be worked out is through histology, you know?

And if that isn’ t enough, histology has recently revealed another surprise. In Germany, the bones of several small sauropods were found in a quarry. Some sauropods grew to be very large. The discovery of small sauropod bones usually means you have found juveniles, young ones. But the histological evidence showed that the bones were from a species of dwarf sauropods that only grew to six meters long and matured in just three years. The new hypothesis is that these dinosaurs evolved to be small because they lived on an island with limited resources.

答案

1. A 2. B 3. B 4. CD 5. D 6. C

文章大意

第一段：教授开篇提到通过研究恐龙化石，能对其外形、大小有很好的了解。但是也得猜测一些事情，比如它们的行为、寿命，因为过去认为这些信息化石无法提供。

第二段： 教授接下来解释了一下恐龙化石形成的过程（petrification）：数百万年前，恐龙骨骼中的所有生物材料被矿物质所替换，而且保留了骨骼外形。一些恐龙化石含有完美保留的小微结构，如单个细胞。对完好保存的骨骼，我们可以用组织学来检验。而组织学需要先把骨骼化石切薄片，能让光透过，随后就可以在显微镜下观察。结果却发现这种保留下来的小微结构含有很多信息，包括恐龙行为的一些线索。

第三段：这导致有关恐龙行为长期存在的假说被证伪，新的假说被提出。教授举例，有一种恐龙，穹顶型的头盖骨很高，头盖骨由厚骨组成。自 20 世纪 50 年代以来，科学家们认为这种恐龙的雄性，在争食物、配偶的时候，可能像今天的大

角羚羊一样撞头。但是几年前，美国一些大学研究人员仔细研究来这些头盖骨的化石在组织学上的样本，本来想找到撞击产生的裂痕。但是结果表明一点撞击痕迹都没有，反而发现了一些小结构，可能像在头盖骨上连接冠饰用的。女学生提问，就像一个鸡冠那种？教授说是的。所以现在古生物学家在猜想，这个冠饰到底是做什么用的。

第四段： 教授举例另一个长期存在的假说：身型巨大的恐龙，需要数十年才能长全。因为从蛋里面孵出来身体很小，要长那么大，合乎常理的推测是需要花的时间肯定不少。教授提到雷龙（Apatosaurus），雷龙属于大型食草类恐龙，脖子很长，重大 25 吨。以前古生物学家基于对当今爬行动物生长缓慢的观察、以及雷龙的体型、嘴巴较小、当时植物营养不那么多等因素，得出“雷龙生长缓慢”的结论。但是当在显微镜下检查雷龙的骨骼组织切片时，发现雷龙骨骼有生长年轮，古生物学家可以从中推测出这个骨骼的生长时间。当把同种恐龙的几个生长年轮样本进行比较的时候，发现这个大型恐龙仅用 8～11 年就长成完全尺寸。教授总结，这种信息仅能靠组织学来揭开。

第五段：不仅如此，组织学还另给了一个惊喜。在德国的一个矿场上，发现了几个小型蜥脚类动物（sauropods）的化石。一些蜥脚类动物可以长得很大，发现了小骨头化石，一般意味着它们是青少年时期的蜥脚类动物。但是组织学的证据表明德国矿场发现的小化石确实来自一个蜥脚类动物的矮化种，只能长到 6 米长、3 年就成年。新的假说认为这些恐龙体型进化小了，是因为岛上的资源有限。

L6

题目

1. What is the purpose of the lecture?
A. To suggest that cryptic patterns in the animal kingdom can be reduced to only a few basic forms
B. To explain how cephalopods change cryptic patterns based on their visual perception
C. To contrast underwater and dryland crypsis strategies
D. To trace the evolution of crypsis in animals as a defense against predators

2. What can be inferred about an animal that only uses stipple crypsis?
A. It will have a difficult time hiding from predators.
B. It is likely to be of a medium body size.
C. It will tend to avoid areas with multiple colors and patterns.
D. It will most likely be found close to a seashore.

3. What happens to some cephalopods when they swim over a gravel patch on the seafloor?
A. They change their skin color to match the color of the darkest pieces of gravel.
B. They display irregularly shaped dark and light patches.
C. They display a disruptive coloration to match the local environment.
D. They quickly swim away from the gravel patch.

4. What features of disruptive crypsis does the professor mention?
A. It disguises the outline of the animal that uses it.
B. It works by contrasting with the colors in the surrounding habitat.
C. It is most effective when used against a single-colored background.
D. It can incorporate a combination of other crypsis patterns.

5. Why does the professor mention the tiger?
A. To illustrate that the results of the cephalopod research can be extended to many other animals
B. To give an example of an animal whose crypsis strategy has been extensively studied
C. To point out how different its crypsis strategy is from the strategy used by smaller animals
D. To argue that predators rely on crypsis less than prey species do

6. What does the professor imply when she says this:
A. Crypsis in cephalopods can rarely fool human visual perception.
B. Few animals use crypsis to hide from predators.
C. New information has led to the reevaluation of some previous assumptions.

D. More cephalopod research needs to be done to obtain accurate data.

听力文本

Narrator: *Listen to part of a lecture in a biology class.*

Teacher: In the animal kingdom, camouflage is a common strategy to avoid predation. There are many examples. The most famous might be the chameleon, a lizard that can change its skin color to match its surroundings. But there are also insects that look leaves or flowers, frogs that look like rock, you could probably think of a dozen more examples. First of all, let me introduce a technical term that' s often used for camouflage, and that' s crypsis. When we examine crypsis in the animal kingdom, it may appear there are a thousand of patterns that animals use to hide from predators. However, recent research involving cephalopods is teaching us that there is less there than meets the eye. Squid, octopuses and cuttlefish are cephalopods and they' re uniquely suited for crypsis research because individual animals don' t have a fixed coloration but actually can very quickly change the appearance of their skin to match almost any habitat. Cephalopods can produce up to fifty different colors, patterns, and textures, but what the research is telling us is that all these patterns employed by the cephalopods are variations under three basic types of crypsis. The first is uniform, or stipple. The word stipple is taken from visual art. It means making small dots to create the impression of a solid color. Anyway, uniform or stipple color patterns are used by cephalopods to match their skin color to fairly uniform backgrounds like a sandy sea bottom. A sandy sea bottom has one basic color with little variation. So, an octopus would only need to change its skin color to one basic color to match the environment. When a cephalopod needs to blend into a non-uniform, a more varied background like gravel, which is made up of small rocks of various sizes and colors, the cephalopod shows a mottled body pattern. A mottled body pattern consist of

alternating irregularly shaped dark and regularly light patches in the skin that roughly match the size of the dark and light objects in the immediate area. And finally, cephalopods also use what's called disruptive coloration. Disruptive color patterns are irregular patches of different shapes and colors that serve to distract the observer's intention and obscure the outline, or the shape of the animal. In other words, a disruptive pattern makes it difficult to perceive the shape and size of the animal. Disruptive patterns can also achieve some level of general resemblance to the background. That is, they often contain small regions with mottled pattern, or even in the Cephalopod will adopt this crypsis strategy when the background is irregular and contains relatively large and varied patches of colors and texture. Now, you may be asking yourself why studying cephalopod crypsis is important. Well, while evolution has produced a wide variety of body colorations and patterns in the animal kingdom, the basic pattern type we've observed in cephalopod are used throughout the animal kingdom and ecological habitats. And that goes not just for animals that can change their cryptic patterns, but also for animals that have just one cryptic pattern they cannot change. In other words, the same basic strategies are used by the chameleons, frogs, and insects we talked about, and by larger animals as well. For example, the tiger's pattern of the black stripes on a lighter background is a form of disruptive coloration.

答案

1. A 2. C 3. B 4. AD 5. A 6. C

文章大意

第一段： 教授开篇提到伪装是生物常采用来躲避被捕食的手段，并举例变色龙、昆虫、青蛙等。教授说先讲一下提到伪装要用到的一个术语“保护色”（crypsis）。

虽然看起来动物伪装技巧千变万化，但是最近一个关于头足类动物（cephalopod）的研究表明，可能没我们想的那么多。

第二段：头足类动物里面章鱼跟乌贼就是伪装高手，很适合拿来研究 crypsis，因为它们没有一个固定的颜色，但是却能依据环境的不同而迅速调整自己皮肤的颜色。头足类动物能产生初 50 多种的颜色、图案跟纹理。但是研究表明所有这些图案变化，都来自 3 种基本 crypsis 的变体。

第三段：第一种 crypsis 就是单一色彩（uniform），也叫点画法（stipple）。是绘画上用小点点来创作出一个色彩的手法。在海底多沙的环境下，头足类动物就用 stipple 这个方法来模拟周围环境。海底多沙的环境，只有一种基础色彩，所以章鱼就只需把自己的皮肤变成一种颜色就够了。

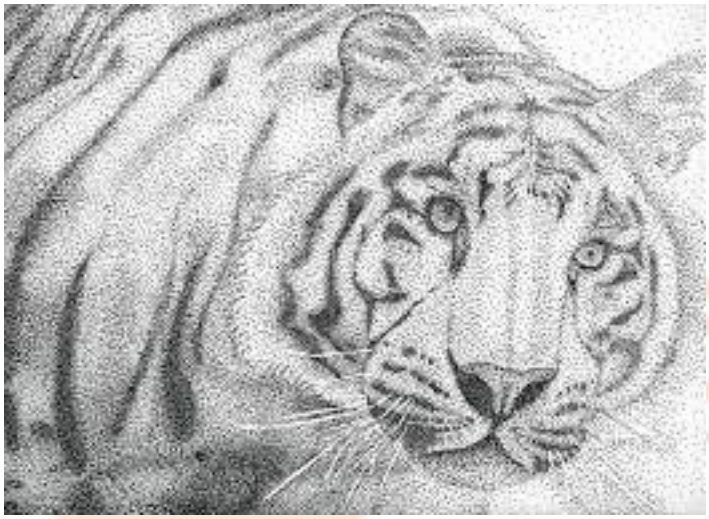
第四段：而当头足类动物需要融进一个非单一色彩的环境时，比如像石头大小不一、颜色不同的碎石环境，头足类动物就呈现出斑驳的身体图案（mottled body pattern）。这种图案由不规则的暗与规则的光图案交替组成，来大致模拟临近区域的光与影的大小。

第五段：头足类动物还用到了“混隐色”（disruptive coloration），这个颜色由不同形状跟颜色的规则图案组成，用来分散观察的注意力，模糊自己跟周围环境的界限。教授说，“混隐色”就是让你看不起动物的形状。

第六段：“混隐色”还可以让跟背景有一定程度的混同，因为“混隐色”本身也有一小块儿有斑驳图案。当背景不规则，回声含有较大、色彩跟纹理多样的时候，头足类动物会采用这种伪装策略。

第七段：教授问，为什么学 crypsisi 很重要。因为进化已经为手足类动物创造出一系列的身体颜色跟图案，这种策略整个动物世界跟生态栖息地都采用了。当然了，这对无法改变伪装图案的动物同样适用。教授说变色龙、青蛙、昆虫的使用的就是这种策略，较大动物也是这样，并举例老虎的黑条纹图案，在一个较淡色的背景下，就是一个“混隐色”。

stipple



L7

题目

1. What is the lecture mainly about?
A. A dependent relationship between a plant and an insect species
B. How the relationship between the yucca plant and yucca moth is changing
C. A type of mutualistic relationship involving more than two species
D. Harmful relationship between various types of organisms

2. Why does the professor mention the wolf and rabbit, and the com and com plant?
A. To show how interactions between animals are different from those between an animal and a plant
B. To provide examples of relationship that exhibit negative interactions
C. To indicate which organism she is studying in her research project
D. To give examples of surprising mutualistic relationships

3. Why does the professor mention the yucca moth's mouthparts?
A. To indicate that they are potentially harmful to the yucca plant
B. To point out that the mouthparts are similar to those of bees
C. To explain why only yucca moths can pollinate the yucca plant
D. To explain the difference between the mouthparts of male and female yucca moths

4. According to the discussion, what will happen if the yucca moth larvae do not get the yucca plant seeds as a source of food?
A. They will eat other yucca moth larvae.
B. They will starve.
C. The mother moth will move them to another flower that has seeds.
D. They will survive by eating other parts of yucca plant such as flowers and leaves.

5. What do yucca moths do to increase the chance that they will produce more offspring?
A. They lay a large number of eggs underneath a small number of yucca plant flowers.
B. They lay many eggs on many different parts of the yucca plant.
C. They lay many eggs on a wide variety of plant species.
D. They lay a small number of eggs on many yucca plant flowers

6. Listen again to part of the lecture. Then answer the question. Why does the student say this:
A. He did not have time to read the entire assignment.
B. He is confused about an aspect of the professor's example.
C. He realizes that he did not hear what the professor just said.

D. He has misplaced his ecology textbook.

听力文本

Narrator: *Listen to part of a lecture in a biology class.*

Professor: OK. So far we've been studying interactions of populations in nature that belong to a category of negative. Um... we've discussed predators that feed on the prey, like wolf and rabbit, corn root worms that feed on the corn and so forth.

This type of relationship is characterized by the fact that one organism actually harms the other. Today I wanna begin talking about some positive interactions.

First of all, let's look at mutualism and the classic mutualistic relationship. A mutualistic relationship is when two organisms of different species "work together," each benefiting from the relationship and do not harm each other. Some mutualisms are so close that interacting species actually can’ t survive without each other. One good example of this is the mutualistic relationship between the yucca plant and yucca moth, which you read about in your textbook for today.

Tom, why is it that yucca plant can't live without the yucca moth?

Tom: Well, it needs the yucca moth as a pollinator, right? Um... the yucca moth collects and carries the pollen from one flower to another in different areas. The yucca plant will produce seeds that get carried off by the wind and eventually germinate and grow into new plants again.

Professor: Great. And interestingly, only the yucca moth can pollinate the yucca plant. Most people think of bees when they talk about a pollinator. But even bees can't pollinate the yucca plant because they can't move the yucca pollen. Yucca

pollen is really heavy and sticky, so it can't be scattered by wind or by casual contact with other insects. But the yucca moth has special mouthparts that enable it to carry the pollen. Uh... Jennifer? Why can't the yucca moth live without the yucca plant?

Jennifer: Well, what the female yucca moth does is... um... when she pollinates the yucca plant, she also lays her eggs. And then, when the eggs hatch, the larvae feed on the yucca plant's seeds. They can't eat any other kind of food. I mean, they will die from hunger unless they eat the yucca seeds.

Professor: Very good! So, this is the perfect kind of relationship. The yucca moth pollinates the yucca plant, the yucca plants make seeds, and in return, the yucca moth gets food for its young from the yucca plant.

Tom: Excuse me, professor. Um, I seem to be missing something here. I mean, I thought you said, in mutualism, neither species is harmed. But the yucca moth larvae eat the yucca plant's seeds. Doesn't that mean the yucca moth actually harms the yucca plant?

Professor: That's a good question, Tom. Actually it's not that much of a problem because there're plenty of seeds for the larvae to eat without harming the yucca plant supply. Also, the yucca moth doesn't lay too many eggs on one flower. She usually lays about 1 to 3 per flower. So most of the seeds will still be safe when the eggs hatch. But it raises an interesting question. What if a female yucca moth plays unfair? What if she plays an unfair game and lays more eggs on each yucca flower than the usual one to three. The moth would certainly be benefited this way because more offspring could be produced. But it wouldn't be very good for the plant.

Well, one scientist has observed that the yucca plant

produces a huge array of flowers and then drops a large number of flowers including many that have been pollinated and have eggs on them. This dropping of flowers is a matter of pure chance. Uh... you never know which flowers will fall off. So, if the yucca moth lays lots of eggs at a few flowers, those eggs may all be dropped, and she may produce no young at all. But if the yucca moth lays fewer eggs on lots and lots of flowers, there's a greater chance that more caterpillars will hatch and survive among the flowers that have remained on the plant. According to the observation, perhaps the yucca plant is in a sense forcing the moth to lay eggs thin and wide.

答案

1. A 2. B 3. C 4. B 5. D 6. B

文章大意

第一段：教授开篇说前面讨论过生物间消极的关系-吃与被吃的关系。今天讲积极的一种关系-互助的关系，并强调了有时候这种互助关系很有效，失去一方，另一方都无法生存。教授举例 Yucca 植物跟 Yucca 飞蛾。

第二段：教授问 Tom，为什么 Yucca 植物无法离开 Yucca 飞蛾存活？Tom 回答，因为前者需要后者授粉，教授补充只有 Yucca 飞蛾才能给 Yucca 植物授粉，因为 Yucca 植物的花粉又重又粘，所以不能被蜜蜂之类的昆虫无意间的接触或者风传播。但是 Yucca 飞蛾的嘴巴有一部位很特殊，能携带 Yucca 植物的花粉。

第三段：教授问 Jennifer，为什么 Yucca 飞蛾离不开 Yucca 植物？Jennifer 回答，当雌 Yucca 飞蛾会在 Yucca 植物上产卵，当幼虫孵出后，会以 Yucca 植物的种子为食，而且幼虫无法进食其它东西。教授总结这就是很完美的互助关系。

第四段：Tom 提问，听起来 Yucca 飞蛾会伤害 Yucca 植物的种子啊，怎么还是互助关系呢？教授解释，Yucca 植物的种子很多，幼虫吃了一部分，但不至于伤害植物。另外，Yucca 飞蛾不会在同一个植物上产太多卵，一般 1 ~ 3 个卵/个 Yucca 植物。

第五段：老师提问，如果 Yucca 飞蛾在同一个 Yucca 植物上产太多卵会怎么样？Yucca 飞蛾能提高自己后代的存活量，但是会伤害 Yucca 植物。教授提到一个科学家的观察，Yucca 植物会生出一系列的花朵，再凋谢掉很大一批花朵。这样可以督促 Yucca 飞蛾不会采用前面提到的策略。

L8

题目

1. What is the lecture mainly about
A. The origin of an important technological idea
B. The history of the air-conditioning industry
C. Applications and benefits of mechanical refrigeration
D. John Gorrie's trouble with the ice industry

2. What problem did air-conditioning solve in the printing industry
A. Strong winds blowing dirt through open windows
B. Changes in paper size due to humidity
C. Warm temperature slowing the time it took ink to dry
D. Frequent breakdowns of machines that became overheated

3. Why was Apalachicola important in the 1840s
A. It produced artificial ice to be sent all over the world
B. It was a large shipping center.
C. It was an important center of medical research
D. It had the highest summer temperature of any of United States city.

4. What does the professor imply about Gorrie's work with tropical diseases
A. He misunderstood the cause of tropical diseases.
B. His work led to important medical breakthroughs.
C. His treatments were similar to those used by other doctors at that time.
D. He was less interested in tropical diseases than in other kinds of disease.

5. What does the professor imply about the ice industry in Gorrie's time
A. It paid members of the media to create problems for Gorrie.
B. It was unwilling to supply Gorrie with as much ice as he needed.
C. It did not support the development of refrigeration systems.
D. It was interested in taking Gorrie's invention for itself.

6. Why does the professor say this:
A. To point out that Gorrie lacked sufficent training in science
B. To imply that other people were working on similar inventions at that time
C. To suggest that inventing a refrigeration machine was not a difficult task
D. To indicate that she is impressed with Gorrie's initiative

听力文本

Narrator: *Listen to part of the lecture in a United States history class.*

Professor: Okay, you want to talk about a really significant invention? How about mechanical refrigeration and air conditioning? Think about it, our country would be a very different place without it. For example, how about the fact that hotter regions of the United States like Florida would only have a fraction of their current populations, or that we probably wouldn't have many skyscrapers since you can't open the windows 50 stories up because of high winds. And then open window was about the only way to cool a room in the past.

And industrial applications of refrigerated air have been extremely important. Let's look at the printing industry for example. Paper expands and contracts according to the amount of moisture in the air. So before air conditioning, it could be impossible to align the inks for printing in color. So even something as mundane as color magazines, something we take for granted, it's the regulation of temperature and humidity in the print shop that makes them possible.

Now it turns out making something cold is not so easy. I mean to make something hotter, you can heat it with fire for example. But to cool something, sure if it's winter you can get some ice and you're okay, but how practical is that? And what if it isn't winter?

Now, one of the guys that who mulled over this problem, was a Doctor John Gorrie. Dr. John Gorrie moved to Apalachicola, Florida in the 1830's. In those days, Florida with its hot, humid summers, its snakes, alligators, mosquitos, and its tropical diseases was a hard place to live.

But Apalachicola was actually the second largest port in

the Gulf of Mexico. Much of the cotton grown in some Southern U.S. States, and that was a lot, was shipped out of Apalachicola.

Now in the 1840's, Dr. Gorrie in deciding how to treat those tropical diseases, deduced that since they occurred in the summer, they must be in some way caused by the heat. The cure therefore, would be to in effect change the season. Take summer and the heat of it away. Oh we're lucky he drew that conclusion, instead of the correct one. Which is probably why he didn't go down in history for any great medical breakthroughs. Anyway, his first experiments with these treatments, led him to develop cold rooms, or rooms cooled with ice. In some cases, the ice was in the ceiling. Gorrie understood of course the principle that cold air is heavier than hot air, and that air cooled by the ice would fall down over the patients. In other cases, he had fans blowing over the ice.

Nevertheless, the bigger problem as you can imagine was acquiring ice. There were ice companies at the time that sawed huge blocks of ice out of frozen lakes and ship this ice all over the world. But keep in mind, Florida isn't close to the Northern United States. Ships filled with ice had to sail a long way and well, some ships would encounter storms, or ice would melt. What actually got there was very much in demand, and subsequently not cheap. You have to wonder how much ice would be left say in August since it had to be stored all summer in insulated warehouses.

So what do you think Gorrie did? Well, with his inclination for tinkering and his science background, he set out to invent an ice making machine! Just imagine, he took advantage of some very basic principles, the most important being this: air that's compressed, cooled and then allowed to re-expand, gets very cold indeed. And that seems simple, but it's basically the principle all of our

subsequent refrigeration technology is based on. Now, Gorries first attempt at a refrigeration machine was big and clumsy. It leaked and broke down a lot, but it did make ice. Unfortunately, although Dr. Gorrie did get a patent for his refrigeration machine in 1851, he never really raised enough money to develop it. He blamed the ice industry for his problems. It's pretty clear that they didn't want to see his invention perfected. Even worse, the media ridiculed his achievement. It's a shame too, because Gorrie was a visionary. He thought this invention could later be adapted to transporting perishable foods all over the country in all seasons among other uses. It's unfortunate nobody took him seriously at the time.

答案

1. A 2. B 3. B 4. A 5. C 6. D

文章大意

第一段：教授先是简要介绍了这节课的主要内容，即美国历史上空调的起源。

第二段：一开始，是印刷行业非常需要空调，因为某些印刷效果必须要在控制温度下进行。当时制热很容易，但是制冷很难。

第三段：所以当时的运冰产业很发达，因为冰运输过程中有种种意外发生，所以价格很贵。

第四段：Gorrie 发明了一种制冰机，是以后空调的原型，但是因为种种原因，他虽然申请到了专利，但这种机器并没有被很好地普及。

L9

题目

1. What is the main purpose of the lecture
A. To describe the importance of recently discovered documents from fifteenth-century Italy
B. To contrast styles of painting in the fifteenth-century with styles of painting today
C. To explain why Renaissance painters were willing to accept guidance from nonartists
D. To make a connection between social values and the creation of art during the Renaissance

2. According to the professor, how was the price of a new painting determined during the High Renaissance
A. Artists usually set the price based on how much time they had worked on the painting
B. Buyers generally dictated the price before the artist began the painting
C. The price was negotiated between the artist and buyer and was usually based on the painting's size
D. The price was determined on the open market and reflected changing fashions.

3. Why was ultramarine highly valued as a pigment during the first half of the fifteenth century
A. It was a shade of blue that had not been seen before in Italy.
B. It was commonly used to decorate expensive jewelry.
C. It was suitable for use both in paintings and on frames.
D. It was a rich color that maintained its intensity over time.

4. Why does the professor mention black clothing
A. To illustrate a trend away from open displays of material wealth
B. To point out the realistic depiction of clothing in Renaissance paintings
C. To show how master artists influenced fashion trends in the fifteenth century
D. To emphasize social differences between master painters and their assistants

5. What does the professor imply about master painters working in the late fifteenth century
A. They alone decided on the subject matter of their paintings.
B. They had higher social status than painters from earlier in the century.
C. They were not required to use as many expensive materials as in the past.
D. It is impossible to know how much of an artwork they personally painted

6. Why does the professor say this:
A. To correct an error he just made

B. To prevent a possible misunderstanding
C. To suggest he is unsure whether paintings became less expensive
D. To highlight an important historical development

听力文本

Narrator: *Listen to part of the lecture in an art history class.*

Professor: We spend a lot of time concentrating only on the artist. What was a painter trying to accomplish? Why did he use or she choose a particular color.

Those are important questions. But We shouldn't forget the social context in which artists work, and that context of course includes where the money come from, I mean. Ok, what's the impetus these days for opinions to be made, and how is it sold usually? Anyone? Lisa.

Lisa: I guess the typical way is an artist getting inspired to create certain painting. Then when it's done, we will seek to set the price, and look for buyers through website I guess or gallery or something?

Professor: Right. But back in the 15th Century Italy, it was a different story. This period is known as the High Renaissance. Some of the most important artists in Europe were working in Florence at that time. And the relationship between artists and buyers, was quite different in the scenarios just described by Lisa. During the High Renaissance, buyers played a very active role, in the initiations, destinations, almost all aspects of the artist work. They specified what was to be painted, what should appear in the background, foreground, colors, yeah, Lisa?

Lisa: But how do we know all this?

Professor: How? We have got hundreds of surviving documents that were from 15th century Florence. With the agreement of the buyers and artists, there is no set format to them, but

they all do appear to the contract in which the buyers dictate the subject matter of a painting and set the terms of the payment. The contract also addressed the materials, buyers actually stipulated what quantity of the most rare and expensive paints the artists will use.

And in some cases, where on the canvas these colors will be applied? And which paint will be applied to the frame? Ok, and the two pigments mentioned most often in those documents are gold and ultra-marine. Ultra-marine was a very rare very expensive blue pigment. And blue pigment was a problem for European artists in the 15th century. Other blues were either pale or unstable, they tended to fade over time. But ultra-marine was an unusually deep vivid blue. A blue that can resist the fading. Especially the highest grade of ultra-marine. So the contract might say that the painter has to use this much gold, and that much of the highest grade of ultra-marine. But if you look at this contract over the course of the 15th century, you can see a change taking place. The early part of the century was a time of conspicuous display of status, it was acceptable to flaunt your money if you had it, to dress in bright colors to wear expensive jewelry, but as centuries progressed, blatant ways showing off how rich you are became less acceptable. It was considered in bad taste. Sable became fashionable. For instance, everyone start wearing black, so the wealthy walks wear cloth the best quality black quaff. And same ship of values was reflected in contracts between artists and buyers. Contracts from the second half in 15th century, place less emphasis on gold and also ultra-marine for example, and when you look at the paints produced toward the end of the century, you do see less of these colors. In fact most of the gold was done on the frame, not in the painting. What became more important was the skill of the art. And contracts provide evidences of this. And to understand how, you have to know something about the way the Renaissance artists worked. The most prominent artists, the master painters, all have assistants

in the workshop.

Lisa: But to the buyers, how to control how much of the painting is done by the masters rather than the assistants?

Professor: You spelled this out in the contract. As the century went on, more and more contracts specified the amount of time the master must spend on the painting. Buyer would demand the certain, like the central figures must be rendered by the master painters, whether this was carry out is evident to the trained eye in the finished work. And like I said, there was less talk about those precious materials in the contract, which probably may be artists' habit. Now I am not saying the paintings are less expensive, wealthy buyers were still able to show their wealth, but in different less obvious ways.

答案

1. D 2. B 3. D 4. A 5. C 6. B

文章大意

第一段：教授开篇说我们在画家身上投入的时间很多：去想他想想表达什么？为什么会用这种颜色？虽然这些问题很重要，但是不要漏了画家们存在的社会语境，这个社会语境包括了其金钱的来源。

第二段：教授提问，现在艺术家们想法产生的动力是什么，以及作品是怎么卖的？Lisa 回答，画家们收到某种启发就去创作，画完厚定价，然后通过网络、画廊找买家。教授说，但是 15 世纪的时候完全不是这样。这个时期正值文艺复兴的顶峰，许多欧洲名家都在佛罗伦萨。买家与画家的关系与现在不同。那个时候的买家很积极，他们会说明想要的作品是怎么样的，背景、前面、颜色等是怎么样的。

第三段：Lisa 提问，我们如何得知当时情景的？教授说我们有那个时候的文件记录啊，包括买家与画家签订的合同。虽然没有“模版”，但是很多合同中都出现了指明绘画内容跟支付方式的字眼。合同还提到材料的信息，买家还指定了画家能用的最稀少、最贵颜料的数量。更有甚者，还有的合同说明了这些颜料能用在画布上的什么地方，哪些颜料能用在相框上，等等。

第四段：教授提到两种提及次数最多的颜料是“金色”跟“深蓝色”，后者很稀少、很贵。当时来说，蓝色很难弄，其它蓝色要么太灰，要么不稳定一会逐渐褪色。但是“深蓝色”却蓝的很生动，不会褪色。最高级别的深蓝色尤其如此。所以，合同上会写明，这种金色能用多少，那种最高级的深蓝能用多少。

第五段：教授说，但是如果能自己查看这些合同，会看到一个变化。15 世纪早期的那部分合同反应的是社会地位—炫富是能被接受的。但是几十年后，这一行为逐渐被视为不可接受了反而会认为你这人品味不佳。转而流行丧服黑。教授举例当时人都穿黑色，所以有钱人也穿黑色，但是质量是最佳的。同样的，合同中也反应出这一点。15 世纪后半叶，合同中强调金色跟深蓝色的内容就少得多了。我们看到那个时期的画作，也确实发现这些颜色越来越少。教授说，金色绝大多数都用在了相框上，而不是画作上。

第六段：绘画技巧显得越来越重要。这一点也能在合同中看到。当时最火的画家们，都有助手。学生提问，买家怎么知道哪副作品是大师画的，哪些是助手画的？教授说，这些都会写进合同里，比如买家会指定画作里的中心人物必须由大师画。检验的时候，是不是大师画的，逃不过明眼人的眼睛。教授总结说，可见，合同中讨论稀有颜料的内容少了，讨论技术的内容多了。但这不是说作品就便宜了，

有钱人还是可以炫富，只不过变得隐秘了。

L10

题目

1. What aspect of eighteenth-century England does the professor mainly discuss?
A. The difficulty of integrating Aristotle's philosophy into the classroom
B. Why certain children's books became best sellers and others did not
C. Two competing philosophies about early childhood education
D. Important ideas behind the emergence of children's literature

2. What point is the professor making when she mentions Barbara Follett's book The House Without Windows?
A. The House Without Windows was the first English book to be regarded as children's literature.
B. Children's literature has been defined in a variety of ways.
C. The most effective children's books include colorful illustrations.
D. Children tend to dislike stories that teach moral lessons.

3. What fundamental idea about childhood did John Locke promote?
A. Children acquire their ideas primarily through appropriate experiences.
B. Children best learn moral lessons through memorization.
C. Children learn about the world by writing their own books.
D. Children should both attend school and work to help support their family.

4. What point does the professor make when she mentions the Greek philosopher Aristotle?
A. Locke's ideas about educating children were not as well accepted as Aristotle's were.
B. Aristotle and Locke had fundamentally different ideas about how children should be taught to read.
C. Aristotle and Locke both benefited from a rigorous education in early childhood.
D. Locke's ideas about educating children were not entirely his own.

5. What was Locke's opinion about fairy tales?
A. They contain valuable lessons about morality and social etiquette.
B. They are ideal tools for motivating children to read.
C. They have a largely negative impact on children.
D. They are more interesting to adults than to children.

6. What was the main message of John Newbery's first successful children's book?
A. Share what you have with others.
B. Study hard to ensure your financial success.
C. Choose your friends very carefully.
D. Do not be afraid to express your opinions.

听力文本

Narrator: *Listen to part of a lecture in an education class.*

Teacher: In the weeks ahead, we' ll be analyzing some children' s literature. Literature considered ideal for various stages of childhood development. Now, this phrase "children' s literature" can mean different things to different people. It can refer to books written by children, such as comic books, or books written for children, like *The House Without Windows* By Barbara Follett. I thought she wrote that book when she was only nine. Children' s books can also refer to books written to instruct children. In fact, the first books written specifically for children emphasized memorizing numbers, the alphabet, religious and moral values, rules of social etiquette, but for our purposes, what we' ll be referring to as children' s literature are books and some short stories and poems written both to instruct and to delight, or to entertain children up to about age twelve. Now, this idea that children' s literature should both instruct and entertain dates back to 18th century England and even today, for the most part when parents and teachers choose literature for children, isn' t that what they' re mainly looking for? So, from your reading, who' s mostly responsible for this notion of children' s literature? Tom?

Tom: Locke. John Locke.

Teacher: Right, the English philosopher and educator whose most of the influential materials to the end of the 17th century and how does Locke fit into the picture?

Tom: Well, for most of western history, childhood itself, you know, the concept of childhood, it didn' t really exist. Children were basically seen as little adults and they were treated that age from an early age, like they worked hard to help support the family and also, it was assumed that humans were like born with all of their ideas and beliefs in

place. But Locke believed that the human mind was blank at first, waiting to be filled with ideas, ideas developed mainly through experience.

Teacher: Yes. Now traces of this philosophy do go back as ancient Greece, to Aristotle. But the philosophy that a child' s mind is blank at birth and that therefore you can shape a child by providing appropriate experiences— the right education, the right books, this idea didn' t become popular until Locke. Locke was the first to successfully promote it. Additionally, Locke popularized the idea that the key to educating a child was to combine learning with pleasure. Why did he think that?

Caroline: Well, I guess he observed that children naturally like to have fun so trying to get them to learn by doing things they didn' t enjoy like memorizing rules didn't make sense to him. But if kids were given fun books with nice illustrations and interesting activities, reading and learning would be like playing a game. Today, this approach is second nature to many parents and educators. But in Locke' s time it was almost revolutionary but what about fairytales? Most kids like them, but our textbook says that Locke didn' t approve of them.

Teacher: Yes, remember fairytales are often set in dark places like forests where evil characters lurk. Locke believed that when adults read such stories to young children, the children would form bad associations that they' d carry into adulthood, like that scary things happen in the dark that the dark was something to be afraid of.

Caroline: But he approved Aesop' s fables, didn' t he?

Teacher: Yes, because Aesop' s fables are instructive. They' re stories with a moral lesson. They teach values like importance of choosing the right friend and they' re lighthearted generally and fun to read, the perfect

learning tool. Okay, so Locke's idea really appealed to mid-18th century England. Everyone was reading Locke, especially parents. See, in England, at that time with its growing middle class, it wasn't as necessary for the children to work to survive. Parents could now afford to treat children as developing individuals to be safe and molded by appropriate experience. In some, parents now believe that a good education, good books could develop children's minds and possibly lead to better jobs and future economic prosperity for their children and into this social climate became a British writer and publisher named John Newberry. Newberry, too, embraced Locke's philosophy and he also acted on it by writing and publishing children's literature. It was Newberry who essentially created a market for it. His first successful book included lots of themes and advice and its primary method was "Learn your lessons and one day you'll be well-off". In Newberry's universe, working diligently in school eventually paid-off monetarily.

答案

1. D 2. B 3. A 4. D 5. C 6. B

文章大意

第一段：教授开篇提到"儿童文学"，指的是适应不同成长阶段的理想读物。"儿童文学"这个说法对不同人所含的意义可能不一样。可以指由儿童写的书（比如漫画），也可以指为孩子写的书（如 Barbara Follett9 岁写的《The House Without Windows》），也可以指教导孩子的书。教授说第一本专门孩子所写的书就是强调记住数字、字母表、宗教、道德观已经行为准则。但是本节课要说的儿童文学，指的是 12 岁前，既为了教导孩子、也为了取悦孩子而写的书、短篇故事跟诗歌。

第二段：教授说这个既为了教育也为了取悦孩子的文学追溯到 18 世纪的英国。

即便是今天，在给孩子选书的时候这也是标准。教授问学生，提出这个想法的人是谁？Tom 回答是 John Locke。教授说他是英国哲学家跟教育家，17 世纪末期最由影响力的材料就是由他编写。Tom 说，其实当时来说，“孩童时期”这个概念并不存在。儿童基本上是被视为小大人，当时人们认为人生下来就已经有那些想法、信仰了。但是 Locke 认为，人脑在起初的时候是一团空白，那些想法是后来通过经历被填进去的。教授说这个说法可以追溯到古希腊的亚里士多德，但是人刚出生的时候大脑一片空白、通过提供合适经历而塑造他，这个说法直到 Locke 推动后才流行起来。

第三段：Locke 还认为教育的关键是把学习跟愉悦感相结合。Caroline 说 Locke 观察到孩子们天然喜欢玩，所以 Locke 认为让孩子们去做一些不喜欢的事情完全没道理。但是如果孩子们拿到的是有插图的、好看的书，参加一些有趣的活动，看书、学习就会像玩一个游戏。而这个方法已经是很多父母、教育者的第二天性。但是当时来说，这个想法还是很具革命性的。

第四段：Caroline 问那童话故事又怎么说？很多孩子喜欢读，但是 Locke 好像不赞同。教授说童话经常以黑森林为故事背景，黑森林里又很多坏人躲在里面。Locke 认为，大人给小孩子读这种故事，会让孩子对黑暗产生不好的联想，这种联想会伴随孩子成年。

第五段：Caroline 问，但是 Locke 好像很赞同 Aesop 的童话故事啊。教授说是的，因为 Aesop 的故事很有启发性，每个故事都有一个道德教育意义，教导孩子们选择朋友的重要性。故事本身很轻松，读起来也很有意思。

第六段：教授说 Locke 的想法在 18 世纪中叶的英国很受欢迎。大家都喜欢读他的书，尤其是当父母的。教授解释说，当时英国中产阶级在壮大，孩子们不需要工作。父母可以让孩子过的好一些，能把他们当作一个需要“成长”的对象，可以为其提供合适的经历来塑造他们。很多父母现在相信好的教育、好书能健全孩子心智，长大后能找个好工作、赚大钱。

第七段：教授说在这个背景下，英国作家、出版人 John Newberry 出现了。Newberry 也很推崇 Locke 的哲学，他自己也写了、并出版了很多儿童读物。而正是 Newberry 才创造了这么个市场。他第一本畅销书涵盖了很多主题跟建议。书中提到的核心理念是“好好学习，将来挣大钱”。在 Newberry 的很多书中也展现了这个理念。

L11

题目

1. What is the lecture mainly about?
A. The relative advantages of foraging and farming
B. The discovery of evidence that dates the origin of agriculture
C. The differences between early farmers and modern farmers
D. The reasons foraging is no longer practiced today

2. In what ways was the forager's diet preferable to that of the early farmer
Click on 2 answers.
A. It had greater variety.
B. It contained more protein.
C. The foods were easier to digest.
D. The foods were easier to cook.

3. Why does the professor mention skeletons found in Greece and Turkey

A. To support the theory that many early farmers died of starvation
B. To demonstrate that height is dependent on geographical location
C. To contrast the difference in height between early farmers and foragers
D. To point out the similarities to remains found in China and in other parts of Europe

4. According to the professor, what was a possible result of the selective breeding of crop plants?
A. The plants became more resistant to heat and cold.
B. The plants became more vulnerable to disease.
C. Crop plants quickly became the only source of food.
D. The plants required more water to grow.

5. What is the professor's attitude toward the classification of ancient people as either foragers or farmers?
A. She believes that such classifications have generally been accurate.
B. She doubts that any new evidence could challenge the classification.
C. She worries that present-day archaeologists are not considering key evidence.
D. She believes the evidence now indicates that the situation was more complex.

6. Why does the professor mention irrigation
A. To explain why early farming often required large amounts of land
B. To demonstrate how farming methods have changed over time
C. To support her point about farming providing a great quantity of food
D. To explain how the Chinese were able to cultivate rice so early

听力文本

Narrator: *Listen to part of a lecture in a history class.*

Professor: So we've been talking about early civilization, those that existed seven to eight thousand years ago. And today I'd like to talk about the switch from foraging, or searching for whatever wild foods are available, to farming, intentionally cultivating crops. Now, the way that switch is frequently portrayed is that it was an improvement. The development of agriculture is usually portrayed as a good thing. But there are advantages to foraging. For one thing, it provides a better balance of nutrients and in particular, more protein at least compared to the diet of the farmers. Foragers end up eating a greater mix of foods, both plants and animals. But the early farmers and to some extent—this is still true today—the early farmers concentrated on just a few crops. It's just rice and wheat. There was less variety and therefore, a smaller range of nutrients and a lot of carbohydrates so the quality of the diet wasn't as good. And we have evidence of this. In Greece and Turkey, when comparing skeletons from forager communities to those of early farming communities, we see that height declined when farming was adopted, quite dramatically I might add. Foragers were on average almost fifteen centimeters taller than the early farmers. That's a lot.

Furthermore, farming increased one vulnerability to starvation. It was easier to live off cultivating crops than to live off the wild, partly because it meant living off fewer plants. I mean, farmers, even modern farmers, only cultivated about twenty different plants on average. And even then, they really just focus on just three: wheat, rice, and maize. Modern foragers, on the other hand, depend on over a hundred different plants. They went with fruits, nuts, berries, roots, beets, and so on. So if a few cultivated crops failed, if the rice crops failed for example, the farmers were in trouble. Now of course, wild plants could

fail too, but foragers eat so many different plants they always have something to eat. Also, domesticated plants may be more prone to failure than wild plants. Don't forget, agricultural crops are the results of selective breeding. Farmers choose certain seeds, ones that have the qualities they want refining the crops enchartered. So, if the seeds of the plumpest potatoes or the whitest white grains are chosen, the hardy strains, the ones that can resist insect attacks or disease or strings of moisture for example, may be eliminated because the farmer hasn't chosen seeds in plants with these characteristics.

So how did the switch from foraging to agriculture happen? Well, no one is really sure. Some speculate that during the final stage of the last Ice Age, about ten to thirteen thousand years ago, there was a shift in climate in a number of locations that led to the decrease of food you could forage for. The failure of wild harvests may have caused people of the different parts of the world to plant some crops to make up for the shortage. There's evidence that the practice of cultivation existed at that time. For example, rice was cultivated in China as long as ten thousand years ago by people who were also still eating wild rice. By counting the proportion of wild rice in cultivated rice in fossil remains, archaeologists have determined that the switch to farming there was a slow one, taking about four thousand years, so it didn't happen overnight. And there's evidence that other groups of people also cultivated some cereal crops blending both foraging and farming for thousands of years.

So putting people into boxes, classifying them as either foragers or farmers, well, we don't do that anymore. Of course, there were advantages to farming. Agriculture provided a greater quantity of food. And when you have the increasing population as was the case in ancient Southwestern Asia, there was an advantage. Also, with

irrigation, crops could be planted in what was until then useless land. For example, rooted barley didn' t grow naturally on the land between Tigris and Euphrates Rivers in ancient Mesopotamia. But once that land was irrigated, all of it could become cultivated. And hectare for hectare, farming was raising more food than foraging. Farmers needed twenty times less land, a hundred times less if they irrigated, to feed the same number of people as foragers needed.

答案

1. A 2. AB 3. C 4. B 5. D 6. C

文章大意

第一段： 教授开篇提到 7k-8k 年前存在的早期文明，今天不再讲收集食物，转而将农耕。教授说，这种转变经常被成为一种进步。但是跟耕种者的食谱比起来，收集食物也有很多有点，比如，收集食物能提供更均衡的营养，尤其是蛋白。因为收集者吃的包括蔬果跟肉类，而早期农耕者--直到现在也是如此--仅仅种植大米跟小麦，种类较少，因此营养种类很少，却有很多碳水化物。教授说有证据能证明这点，在希腊跟土耳其，把挖掘出来的收集者的骨骼跟早期农耕者的骨骼进行比较，能发现采用农耕后，人的高度下降了，后者比前者矮了 15cm。

第二段：教授进一步说，农耕使得人们更容易受饥饿的威胁，吃自己种植的果实比去野外找食物要容易些，部分原因就是靠较少的作物存活。教授说，当代农民平均只种植 20 种左右的作物，即便如此，他们也集中在 3 种上：小麦、大米、玉米。当代收集者却依靠上百种植物。所以，如果一些种植的作物没了产出，农民就有麻烦了。而即便野外的部分作物没了产出，收集者还是可以靠其它的东西吃。

第三段：教授说，另外，种植的作物比野外植物更容易没产出，因为农业种的作物是“选择性培养”出来的。农民选择的种子都是产量最高、最好看的，抗虫品种、抗病、耐潮等品种会被淘汰掉。

第四段：教授问那么这种转变怎么发生的？没人确定到底是怎么样的。一些人推测在最后一次冰河时期末期，全球多地气候变化导致能找到的食物减少，所以人们开始种植以弥补这个缺口。教授举例 1 万年前的中国还在吃野生大米，通过测量野生大米跟种植大米的比例，发现由收集到种植的转变花了 4k 年。教授还提到其它地方也有种植谷物却也同时收集果实、并且持续了几千年的例子。

第五段：教授总结，所以现在不再把人简单分为收集者跟农耕者了。当然，农耕也是由优势的，它为人类提供了足量的食物，并举例古代的东南亚，当人口数量上升时，食物的需求就上升了。另外，农耕还有一个优势，引入灌溉技术后，能把作物种植在以前无法种植的地方。教授举例 rooted barley，说这个东西本不长在靠底格里斯河跟幼发拉底河的古美索不达米亚地区，但是当那个地方被引入灌溉后，rooted barley 就能种植了。教授说种植出东西的数量逐渐超过了收集来的，如果喂养同样数量的人，农耕所需的土地只有收集所需的土地 1/20，如果灌溉的话，就只有 1/100 了。

L12

题目

1. What does the professor mainly discuss?
A. New evidence about construction methods used for the Globe Theatre
B. Evidence used by scholars to determine the shape of the Globe Theatre
C. The debate over how closely the rebuilt Globe Theatre resembles the original
D. A controversy over which Shakespearean plays were performed in the Globe Theatre

2. What does the professor suggest was inconvenient about the Globe Theatre?
A. Many events occurred there at the same time.
B. There were no seats for any of the spectators.
C. Many of the spectators were not protected from rain.
D. Some spectators could not see the whole stage.

3. Why does the professor talk about Shakespeare's play Henry V?
A. To help explain why scholars think it was the first play presented in the Globe Theatre
B. To help explain why some scholars believe the Globe Theatre was round
C. To describe how scholars determined when the Globe Theatre was originally built
D. To describe how difficult it was to perform Shakespeare's plays in the Globe Theatre

4. What does the professor say in support of the conclusion that the Globe Theatre was NOT round?
A. Archaeological evidence shows that it had many sides.
B. An audience member from Shakespeare's time described it as a many-sided building.
C. A map showing it as a round building was hand copied from earlier maps.
D. Round buildings are difficult to construct from wood.

5. The professor mentions a book on English theater history. What does he imply about the book?
A. It has been very helpful to scholars.
B. It should have included drawings.
C. The drawing it contains is probably inaccurate.
D. Its author was not an expert on Shakespearean plays.

6. Why is Hollar's map of London considered more reliable than other maps?
A. It has accurate drawings of buildings that still stand in London.
B. It was created by someone who lived in London his whole life.
C. It was created more recently than other maps.

D. It has been better preserved than other maps.

听力文本

Narrator: *Listen to part of a lecture in a theater history class.*

Professor: One interesting aspect of studying Shakespeare and *the recent theater* is what we don't know about the theater where most of Shakespeare's famous plays were performed, the Globe Theater. We do know that the globe was first built in 1599 and then it had to be rebuilt after a fire in 1613. And it was finally torn down sometime after 1643. But beyond that history, scholars want to know about the physical aspects of the building because that could help us understand the plays even better. So, what did the Globe look like? Well, picture a building shaped kind of like a stadium, where nowadays we might go to an athletic event or a big outdoor concert. It was like a stadium but smaller, about 30 meters across. Inside this open-air theater was a stage in one end and a big central yard with standing room for spectators and surrounding that central yard was seating for those who could pay a little more, seating like we have in the stadium today. And we know the stage with a roof over it, so if it was raining the actors would stay dry but the spectators standing in the yard would just get wet. Now, as for the exact shape of the Globe Theater, for a long time people just assumed that it was round. It was after all, called The Globe. But what is that really based on? One bit of evidence that it was more or less round, and made of wood comes from the prologue of the play *Henry V*, where we hear the theater described as "this wooden *o*" comparing the theater to the letter *O* makes it sound as if the building must be round. But what other evidence do we have? Well, the biggest piece of evidence is a map, drawn by an artist named Wenceslas Hollar. On Hollar's map you can see all of the theaters in London and this map depicts the Globe Theater as perfectly round. People take this map pretty seriously because it's considered the most reliable

map of London from that time. I will explain why in a minute.

On the other hand, there are no reasons to think that the globe wasn't actually round. For one, we know that it was made of wood and it's almost impossible to build a perfectly circular building out of wood. Heavy pieces of wood aren't easy to bend form a circle. So some scholars think that the Globe had straight sides. See, we have another map of London that showed the Globe with eight distinct sides. This map gives the panoramic view of London and was printed in 1616. We also have a book, published months later, a book on English theater history that includes a drawing of the Globe showing it as an eight-sided building. But what do we make of this evidence? Well, the book that showed the Globe as having eight sides was written in 1790, about 150 years after the Globe was gone. So, how much can we trust it? I don't think the author has been there personally to see the Globe. And the map that showed it as an eight-sided building contradicts Hollar's map, even though other details from Hollar's maps are considered accurate. Scholars, what they do is they compare maps to landmarks and buildings that still exist today. You can do that in cities like London, where you still have buildings that were around in the early 1600s. And from most details, Hollar's maps have proved to be much more accurate than the others.

答案

1. B 2. C 3. B 4. D 5. C 6. A

文章大意

第一段： 教授开篇提到研究莎翁有意思的一点是我们对其绝大多数有名的戏剧所表演的舞台—Globe Theater—所知甚少。我们知道它建于 1599 年，之后由于

失火，不得不于 1613 年重建，最终于 1643 年以后的某个时间被拆除。学者想多了解下剧院的物理结构，这样更有助于我们理解戏剧本身。

第二段：那这个剧院看起来是怎样的呢？教授说，想象一个建筑样子的体育馆，跟今天去看比赛、演唱会的很想、但是小一些，直径大概 30 米左右。剧院露天，内部一端是一个舞台，中央场地比较大，里面是“站票”，中央场地周围的是“坐票”，后者稍贵。舞台上方又一个屋顶，所以下雨的话，演员没事，但是“站票”区的人可能就成落汤鸡了。

第三段：教授说人们长久以来都认为 Globe Theatre 的准确造型是圆的，因为叫“Globe”（球）啊。但这个想法有什么根据呢？教授说一个证据来自《亨利五世》的一段开场白，戏剧里把舞台描述成“木质的 O”，把剧院跟英文字母 O 相比，听起来好像剧院应该就是圆形的了。但是有没有其它证据，最大的证据就是一张地图，由 Wenceselas Hollar 所画。Hollar 画的地图上，由伦敦所哦呦的剧院，这图上就把 Globe Theatre 画成立圆形。这个地图的可信度很高，因为它是当时伦敦最可靠的地图了。

第四段：教授说也由理由反驳圆形剧院的观点。我们知道剧院是木质的，所以几乎不可能做出一个完美的圆形剧院来，因为又厚又重的木材不是那么容易完成一个圈的。据此，一些学者就认为 Globe Theatre 是直边的。教授说，关于剧院的样子，我们还有一张图，而这张图上，Globe Theatre 被描绘成一个八边形的样子。这张出版于 1616 年的图给了剧院一个全貌特写。此外，还有几个月之后出版的一本关于英国戏剧历史的书，书里面也记载着一个八边形的剧院

第五段：教授说，那怎么看待这些证据呢？那本书写于 1790 年，差不多是 Globe Theatre 毁了之后的 150 年。所以其可信度就有点问题。而那个跟 Hollar 地图相左的图解又怎么说呢？教授说由于目前伦敦还保留了一些 17 世纪早期的一些建筑，所以学者们就拿着 Hollar 的地图去比对，发现其中绝大部分的细节要比其余的材料要准确的多。

L13

题目

1. What does the professor mainly discuss?
A. How Realist novels differ from Realist plays
B. How Zola's ideas influenced other Naturalist playwrights
C. Ideas that contributed to the Naturalist movement in theater
D. Realist novels that were adapted as plays

2. Why does the professor discuss a science book that was published in 1865?
A. To give an example of what Zola's contemporaries were reading
B. To describe a major influence on Zola's writing
C. To comment on advances in science in the nineteenth century
D. To point out that the term Naturalism was first used by scientists

3. According to the professor, what was one of Zola's goals in creating slice-of-life theater?
A. To adapt Realist novels to the stage
B. To feature characters who live in rural settings
C. To inform his audiences about social issues
D. To create a neatly structured story, with beginning, middle, and conclusion

4. According to the professor, what is a feature of plays that were written using the principles of Naturalism?
A. They reflect a view of life that is not always happy.
B. They present characters as helpless victims of fate.
C. They are not objective in their representation of human conflict.
D. Their characters are usually members of the upper classes.

5. According to the professor, why were Zola's plays unsuccessful with theatergoers
A. They received bad reviews from the critics.
B. They were much longer than other plays written at the time.
C. Their plots contained many unbelievable coincidences.
D. Their characters were not realistically portrayed.

6. What is the professor's opinion of Henri Becque's plays?
A. They illustrate Naturalist principles better than Zola's plays do.
B. They have the same problems that Zola's Naturalist plays had.
C. They are not as entertaining as Zola's plays.
D. They should not be considered Naturalist plays.

听力文本

Narrator: *Listen to part of a lecture in a theater class.*

Professor: So, last class we talked about the realist movement in theater history. Today, we' ll be talking about an offshoot of realism, but first let' s review what we' ve said about realism. Katy?

Katy: Realism. Well, it started around the late 1800s. These playwrights wanted to present the world as it really was, not idealized. So realist plays were generally about ordinary, everyday people in their lives, not like clear-cut heroes and villains.

Professor: Good. Now, the movement we' re looking at today, naturalism, took these ideas further to make plays even more true to life. One thing that set it apart was that naturalist authors were influenced by scientific methods in their goal of achieving greater accuracy. They tried to be objective about their character like a scientist observing a species under a microscope. And rather than given the characters the conventional traits of a hero or villain or presenting them as victims of fate, naturalists create a character with more complex traits and motives and who are influenced by only the forces of heredity and environment.

The greatest representative of realism was the French writer Emile Zola. Zola wrote some influential naturalist novels but he also proposed a theory of naturalist theater. He was greatly influenced by a science book that appeared in 1865. This book emphasized the importance of experimentation to scientific progress; in particular, the importance to scientific research in understanding the effects of the environment on the human body. These ideas made an impression. In 1881, Zola wrote an essay, *An Experimental Novel*, in which he said the task of a writer was similar to that of a scientist or a doctor. A writer

should be objective like a scientist and design novels like well, experiments in that the characters are put in especially designed environments so the writer can record what happens when characters interact with their environment and each other. And just as a doctor might look at the patient's environment to help find a cure for a medical problem, Zola saw the role of the writer as exposing the problems of society in order to find a cure for social ills.

Student: But his essay was about novels. Did Zola think his ideas applied to plays, too?

Professor: Yes. And he translated his ideas into theater. He was critical of theatrical conventions of his day; for example, an almost formulaic development of plot where the story moves from conflict to crisis to resolution. Zola argued that real life doesn't obey such clear cut storylines. It isn't a neatly packaged story. Rather it's an accumulation of haphazard events. Zola believed instead of telling a conventional story with clearly defined beginning, middle, and conclusion, a play should present something more faithful to real experience.

Student: Sounds like what you do with nonfiction. You know, like with the newspaper article or a documentary film.

Professor: It does, doesn't it? And no surprise really, for a movement growing out of realism. Zola had a name for it, slice of life theater. Ordinary, believable characters placed in real life situation who interact in a plausible manner. By advocating this approach, Zola wanted to provide a new kind of theater, theater that explores socially relevant issues and educate audience rather than merely entertaining them. And since life is often not rosy, it follows that these plays rarely ended happily, which is another feature naturalism, this darker, gloomier view of life.

The problem arose when Zola tried to put his principles into practice. When he turned one of his own novels into a play, the result was well, not very successful. Since he compressed the entire plot of a lengthy novel to fit about two hours performance time, Zola had to cut out so many details and accelerate the pace of the story to the point that it seems exaggerated, full of unbelievable coincidences. So while Zola successfully created a realistic environment and characters, the play itself didn't live up to his naturalist principles.

Student: Did his other plays have more success?

Professor: Not really. They all contained the same problem. Kind of ironic, isn't it? That the preeminent naturalist novelist couldn't produce a single successful play of that genre.

Student: Were any naturalist plays successful?

Professor: Yes, but there's another irony. The most successful naturlist play, by successful I mean plays that captured what the naturalist movement is about, they were written by a playwright who didn't even consider himself a naturalist, Henry Becque. Becque's play, *The Vultures*, captures many of Zola's ideas. It's the story of an average family that suffered a crisis for which there's no forewarning. There's no real hero. There's no neat conclusion at the end and the overall effect is pessimistic.

答案

1. C 2. B 3. C 4. A 5. C 6. A

文章大意

第一段： 教授开篇提到上节课讲了戏剧历史上的现实主义运动，今天要讲的是现实主义的分支。先复习一下现实主义的定义。Katy 说，现实主义开始于 19 世

纪末期，当时的剧作家们想展现出来的是真实的世界， 而不是理想化的样子。所以现实主义是关于普通老百姓的日常，而不是英雄与反派。

第二段： 教授说今天讲的是自然主义，想把戏剧变得更贴近生活。其一大特色是自然主义作家在创作时为了极大保证准确性，会用到科学方法。他们尽可能对人物保持客观，就好像一个科学家用显微镜观察一个物种一样。另外，自然主义者创造出来的人物身上没有传统的英雄、反派、命运多舛的悲剧等特征， 这些人物的特征、行动仅仅受环境、前后文的一致性影响。

第三段：教授提到写实主义的最伟大的代表人物是法国作家 Emile Zola。Zola 的基本自然主义小说影响不小，但他也提出一个自然主义剧院的理论。他深受 1865 年的一部理科书影响。书中强调了试验对于科学进步的重要性，尤其是环境对于人体影响的研究的理解，更是如此。1881 年，Zola 发表了一片论文《An Experimental Novel》，文中他说一个作家的人物要跟科学家或者医生一样保持客观，编写小说就好像把人物放进一个特定的环境里，然后记录下人物跟环境、相互之间的作用，就像个医生看待病人的环境并找到治疗办法一样。教授说 Zola 认识到了作家的作用：暴露社会问题，来解决社会问题。

第四段：学生提问，Zola 说的是小说吧？戏剧上也能用吗？教授说能，他对当时戏剧传统很不屑。教授举例几乎模版一样的情节发展—由冲突到危机再到解决。Zola 认为，日常生活没有如此泾渭分明故事线，生活不是一个完美故事，而是一堆随机事件的堆积。Zola 戏剧不应死板地按照开头--中间—结尾展开，而应该更贴近真实的体验。学生说，听起来像是“非构想”类，如报纸文章或是纪录片等。教授说确实。

第五段： 教授说从“写实主义”里发展出“自然主义”并不那么意外，Zola 还给它命名“生活剧场的切片”。平凡人物放在真实生活情景下，并以说得通的方式相互作用。以此，Zola 想开辟一个新类型的剧院，能探究社会问题并教育观众而不是取悦他们。而且因为生活并不总是美好，所以那些戏剧很少以大团圆结局。这也是“自然主义”的另一特征：对生活看待地较黑暗、较深沉。

第六段：教授说，当 Zola 试着按这些原则写出戏剧的时候，问题就出现了。他想把他的一部小说变成一部戏剧，结果并不是很理想，因为他把需要一个长篇小说发展起来的小说，缩减成了一部 2 小时的戏剧，因此他不得不删去了很多戏剧，整体步调加快了很多，以至于有点夸张，全部都是难以置信的巧合。所以，Zola 虽然创作出很真实的环境跟人物，但是戏剧本身并没有达到自然主义的标准。

第七段：学生提问，那他其它的戏剧有成功的吗？教授说并没有，很讽刺的是他的戏剧都有这个同样的问题。学生又提问，那有“自然主义”的戏剧成功的吗？教授说有。但这也是另一个讽刺。多部最成功的自然主义戏剧（教授说“成功”指的是能很好抓到自然主义运动的精髓），是出自 Henry Becque 之手，而 Henry 并不认为自己是“自然主义”者。Henry 的戏剧《The Vultures》，就 get 到 Zola 诸多想法。这个戏剧是关于一个普通家庭经历了一个毫无征兆的危机，整部戏里没有真正的英雄，没有大团圆的结局，整体比较悲观。

L14

题目

1. What is the lecture mainly about
A. Advantages and disadvantages of using technology to compose music
B. Reasons that many critics do not like music that is electronically generated
C. Developments in electronic music during the twentieth century
D. How composers use electronic devices to imitate sounds of traditional instruments

2. According to the professor, what advantage over vinyl records did magnetic tape offer to composers?
A. Longer pieces of music could be recorded on magnetic tape.
B. It is possible to rerecord music on magnetic tape.
C. Music could be transferred easily from magnetic tape to computers.
D. Magnetic tape allowed composers to manipulate sound in more ways.

3. What points does the professor emphasize about musique concrete?
Click on 2 answers.
A. It exploited naturally occurring sounds.
B. It gained popularity as the quality of radio broadcasts improved.
C. It was very time-consuming to create.
D. It was created on machines that most composers could not afford.

4. What does the professor imply about critics who had a negative reaction to musique concrete?
A. They were biased because it could not be performed by live musicians.
B. They came to appreciate it more over time.
C. Their exposure to it was too limited to offer a fair critique.
D. Their definition of music was too narrow.

5. Why does the professor mention furniture making?
A. To explain that creativity is required whether composing music electronically or traditionally
B. To emphasize the relative ease of composing music on a synthesizer
C. To suggest that given the right tools, almost anyone can compose music
D. To demonstrate that electronic music is a unique art form

6. The professor points out that many composers now use computer software to create music. What reason does he cite for this phenomenon?
A. Computers can produce the sounds of many different musical instruments.
B. Computers enable composers to collaborate with one another over the Internet.
C. Computers give composers access to a great variety of recorded music.

D. Computer software generates a visual analysis of the sound waves the composer is working with.

听力文本

Narrator: *Listen to part of a lecture in a music history class.*

Professor: Probably the most important use of the development in the 21st century was the emergence of electronic music thus the ability to generate sounds electronically opened up many new possibilities for composers. So, let's look at three major breakthroughs in this area. The first was magnetic tape as a recording medium. Before magnetic tape, vinyl was used as a recording medium. There were vinyl record albums, maybe you've seen your parents' or grandparents' vinyl collections, those flat round black disks with the grooves. But in addition to being used for recording music, tape and to a certain extent vinyl could be used for creating music. Creating music from tape was a vast improvement over vinyl because tape is much more versatile. With vinyl, the only way sound could be manipulated was by changing the speed but with tape, sounds could be manipulated in many ways by cutting and splicing the tape.

Let me give you an example of a type of music that employed these techniques. By the late 1940s, composers were experimenting with a musical style called musique concrete. Musique concrete began with natural sounds recorded on vinyl but tape was even more conducive to creating musique concrete. With magnetic tape, composers could cut the tape and splice the pieces back together any way they wanted, essentially reorganizing the sounds. They could add echoes, or put in a piece of tape backward.

Student: But what do you mean by natural sounds? I remember reading about some early composers using the sound of gravel moving in a box.

Professor: Yes, that is probably the most interesting aspect of musique concrete. Basically any sound, street noise, instrumental or otherwise recorded on tape could be manipulated into a musique concrete composition. The only limitation was the composer' s imagination. Glass breaking, industrial old machinery, any sound was fair game.

Now, some critics don' t consider these kinds of mechanical manipulations or even musique concrete itself to be music but I think that if you approach the material with an open mind, you' ll realize what music contract did was expand the definition of music and musical expression. Manipulating magnetic tape wasn' t easy, though. It could take hours to produce one minute of music. Nevertheless, composers flocked to this new medium. It became very popular and let to further experimentation and research in electronic music.

Now, the next breakthrough was the synthesizer. Most of you have seen synthesizers. In rock bands, the keyboardist is almost always playing the synthesizer. It often looks like a piano, but does anyone know what a synthesizer really is?

Male: It' s an electronic instrument that mimics the sound of a piano, right?

Professor: Okay, but a synthesizer is much more than an electronic piano. It' s a machine that can generate many types of sounds. And that' s a key point. Whereas tape machines could be used to manipulate sounds, they couldn' t generate new ones. A synthesizer can generate new sounds, and then combine them in infinite ways. It can imitate sounds of conventional instruments as well as create distinctive tones. And the second thing it can do is modify sounds.

Male: Like changing speeds, like you' ve said before?

Professor: Yes, and that' s the beauty of the synthesizer. You can make sounds faster, slower, higher- pitched, lower-pitched. You can of course change the volume. You can make a single cord reverberate through an entire song, something the best musicians can' t do with a conventional instrument. And all of this can be done, as you can imagine, relatively quickly. No more tape splicing. It' s kind of like making furniture using modern power tools instead of hand tools. The difference is that dramatic.

Okay, so moving on to the third innovation in electronic music. Can anyone guess?

Female: Um, computers?

Professor: Right. Many composers don' t even use musical instruments anymore. As computers have become more powerful, many composers have taken to using software programs specifically designed for composing music. In a sense, the computer has become their instrument. This approach has many advantages. For example, one person can compose an entire symphony with thirty or forty or a hundred different instruments or sounds using sophisticated software. And they listen to it on the computer. If they don' t like what they hear, they can make whatever changes they want—take out a melody here, add another instrument here, speed up this section, make that section louder—and then play it again. More control, more artistic freedom, that' s what these technological innovations have brought to music.

答案

1. C 2. D 3. AC 4. D 5. B 6. A

文章大意

第一段： 教授开篇提到 21 世纪最重要的技术进步可能要数电子音乐，它给作曲家们提供了更多的可能性。本节课要讲的就是这一块儿的 3 大突破。

第二段：第一个突破：磁带。在磁带问世前，唱片（乙烯基）被当作了记录媒介。教授说大家可能见过爷爷奶奶的收藏，那种又圆又黑、上面凹凸不平的圆盘状的东西。但是除了用来记录，磁带（某种程度上唱片也是）可以用来创作音乐。唱片仅仅能通过改变转速来操纵声音，而磁带却可以多样化地操纵：可剪、可拼。教授举例，上世纪 40 年代末期，作曲家们开始尝试一种新的音乐风格，叫具象音乐【Musique concrète ，<法>(将雨声等自然声音录下后加以剪辑而成的)具体音乐(作品)，见链接：http://codehop.com/organizing-sounds-musique-concrete-part-i/】，具象音乐刚开始的时候用唱片把自然声音录下来，但是磁带对具象音乐的创作更有帮助。作曲人可以随意剪、随意拼磁带。比如可以加回声、把一段磁带倒过来拼回去。

第三段：学生提问，自然声音是什么鬼？记得以前读过他们用到了碎石在盒子里移动的声音。教授解释说，Musique concrète，基本上就是任何声音，如街道上的噪音，制作 Musique concrète 时要么就用乐器发出、要么就用磁带录制好的。唯一的限制就是作曲家的想象，任何声音都能用。

第四段：一些乐评人不把这些机械操纵、甚至是 Musique concrète 当作音乐。但是教授说，如果你敞开心胸，这种音乐形式扩展了音乐的定义与表达。要操纵磁带也不容易，1 分钟的音乐做起来可能要好几小时。即便如此，作曲家对此还是很推崇，对其的试验与研究也更进一步。

第五段：第二个突破是合成器。教授说摇滚乐队里，键盘手几乎都在玩合成器。合成器看起来像是一架钢琴。教授提问，合成器是啥？男学生回答说，模拟钢琴声的电子乐器？教授说，不仅如此，合成器能生成多种类型的声音。磁带能操纵声音，但是无法生成新声音。合成器却能生成新声音，并把它们以无限的方式组合。既可以合成传统乐器声，也能创造出特别的音调。

第六段：教授说此外，合成器还能修改声音。男学生提问，比如改变速度？教授说是的。这正是合成器的美妙之处。它能让声音快、慢、高、低、大、小，还能让一个弦的声音贯穿整首歌，用传统乐器再好的音乐家也做不到这点。而合成器却能相对快速完成这些。教授说不再需要剪拼磁带了，就好像有了电锯、就不用手工工具一样。

第七段：第三个突破是电脑。现在很多作曲人都不用乐器了，转而用专门的电脑软件。教授说某种程度上，电脑就是他们的乐器。这种做法有很多有时，单个人就可以作出需要 30、40、甚至上百中不同的乐器声的交响乐。此外，在电脑上播放时，听到哪部分不喜欢，他们可以随意更改，再听。教授总结，对音乐有更多控制、也更有艺术自由。而这正是这些技术创新带来的。

L15

题目

1. What does the professor mainly discuss?
(A) Various styles of architecture in the early United States
(B) The influence of ancient Roman architecture on architecture in the early United States
(C) Possible reasons for the decline of the Federal style of architecture
(D) Differences between ancient Roman architecture and the Federal style of architecture

2. According to the discussion, what were two characteristics of the exterior design of a home built in the Federal style?
Click on 2 answers.
(A) The design was relatively simple.
(B) The chimney was positioned above the front door.
(C) The door and windows were much larger than in older houses.
(D) The right side of the house and the left side of the house were identical.

3. What is the professor's belief about architecture professors?
(A) They often fail to make their lectures interesting for students.
(B) They tend to focus too little on factors that have influenced architectural design.
(C) They spend too little time discussing recent developments in the field of architecture.
(D) They tend to be more creative in their teaching than professors in other fields.

4. Why does the professor mention the Adam Brothers' firm?
(A) To explain how early American architectural design principles became popular in Great Britain
(B) To point out that most early American architects had little or no formal training
(C) To explain one way in which ancient Roman architecture came to influence Federal style architecture
(D) To point out that British architects in the 1700s rejected the architectural design principles of ancient Rome

5. According to the professor, in what two ways did Thomas Jefferson help increase the use of Roman architectural design principles in the United States
Click on 2 answers.
(A) By passing laws that favored the use of Roman design principles
(B) By sponsoring architects who used Roman design principles
(C) By designing buildings that incorporated Roman design principles
(D) By teaching Roman design principles to architecture students

6. What does the student imply when she says this:
(A) She is not confident that her answer is correct.
(B) She wants the class to listen carefully to her explanation.
(C) She thinks another student may have already given the same answer.
(D) She has written the answer on a piece of paper.

听力文本

Narrator: *Listen to part of a lecture in an architecture class.*

Professor: Okay, today we're going to continue our discussion of early United States architecture. Last time, we discussed the characteristics of the federal style of architecture, which was a dominant school of design in the United States in the late 1700s. What were a few of the characteristics of the federal style? Allen?

Allen: Well, their exterior design was relatively simple and very symmetrical, like the front of the door would have the door in the middle and it would have the same number of windows on each side and a chimney at each end of the house, so the left side of the house and the right side of the house were mirror images of the other.

Professor: Okay, good!

Allen: But the interior design was more complex and asymmetrical. You know, you didn't have just four square rooms, two on each side of the hallway like older houses had.

Professor: Okay good! Those are two of the primary defining characteristics of the federalist style. There are many other findings, of course but you can review those on your own. Last time, I also mentioned in passing that the federal side incorporated many elements of ancient Roman architecture. And before we read the federal style, I'd like to take a few moments to consider the question: why? Why did architects in the newly formed United States in

the 1700s have this fascination with an architectural style that took its fuse from ancient Rome? I' m afraid the "why" question doesn' t get the full attention it deserves and I' m as guilty for that oversight as other any architecture professor. Architecture is a course about design and is about schools of thought and all of that. But it' s also about culture and history and the context those history and culture it provides. These external factors are not just a backdrop for the design of the building. And they' re not just interesting historical footnotes. They are as much a part of the study of the design of the building as the design itself.

So, back to my question. Why ancient Rome? Well, in part the influence of ancient Rome in architecture was indirect, arriving by way of Great Britain, specifically, by way of a British architectural firm known as Adam Brothers. Adam Brothers was a prominent firm that designed many homes for the British upper class in the mid-1700s. And by the late 1700s their style had arrived in the United States, where it was especially popular with wealthy merchants.

Now, Adams Brother architects were themselves greatly influenced by ancient Roman architecture. So when architects in the United States built, so to speak, on the Adams Brother' s style, to create the federal style, they were also actually indirectly adopting many elements of ancient Roman architecture.

Okay, and there is another reason why this style resonated so deeply in the early United States. Jenifer?

Jenifer: This is really a shot in the dark, so don' t write this down or anything. But I mean the writers of the American constitution and a lot of the early presidents I know that they admired ancient Rome. Is it possible that admiration somehow led to an influence on the architecture of that time?

Professor: Actually, that is a big part of the answer. The early political leaders of the United States, the Founding Fathers, had a great respect for the politics and the culture of ancient Rome. And so, this new style of architecture being practiced by the Adam Brothers among others, immediately struck a cord with them, especially with Thomas Jefferson. Jefferson, you may recall, drafted the Declaration of Independence and later became the third president of the United States. Jefferson was himself an architect and the designs for many of his buildings, like the Capitol Building for the state of Virginia, were based directly on Roman architecture.

Jefferson also sponsored other architects like Benjamin Latrobe who worked on the design of the United States Capitol Building in Washington DC, which also incorporated elements of Roman architectural design.

答案

1. B 2. AD 3. B 4. C 5. BC 6. A

文章大意

第一段：教授开篇提到要继续谈论美国早期建筑。上节课提到了 18 世纪主流的联邦式建筑。教授提问 Allen，联邦式设计的特征有哪些？Allen 回答，外饰很简单、对称，并举例前门会放在中间位置、门两边的窗户数量一致、房子两端会各有一个烟囱。看起来，房子的左右两边就像是互为镜像。但是内饰会更复杂、不对称，不会像旧房子一样在走廊两端各有一个四四方方的房间。教授说总结的很好，还有其它联邦设计的建筑的特点，让学生自己去看。

第二段： 教授还提到，联邦设计的建筑吸收了很多古罗马建筑的元素。教授问为什么 18 世纪的美国会如此痴迷这样一种借鉴了古罗马风格的建筑呢？教授补

说自己犯了跟另一个建筑学教授同样的错误，不该这么问问题，这么提问忽视了一个重要信息。接着他说，建筑学是一门有关设计、有关流派的学科，同时也是一门有关文化历史、以及那些文化历史所提供的语境的学科。这些外部因素不仅是建筑设计的背景、不仅是有趣的历史注脚，它们也是设计学本身的一部分。接着教授回到为什么会有古罗马元素上来，那个时候古罗马风格建筑的影响由英国建筑公司 Adam Brothers 在 18 世纪引进美国，很受当时富豪欢迎。而 Adam Brothers 本身很受古罗马建筑的影响，所以当美国本土设计师在 Adam Brothers 的风格之上，来创造联邦风格，不自觉地引进了古罗马风格

第三段：教授问 Jennifer，另一个原因这个风格在美国受众繁多的原因在哪儿？Jennifer 回答说，自己是瞎猜的，可能美国的国父们很喜欢古罗马建筑，所以有可能这也左右了当时建筑的设计。教授说，这其实是很大一部分的原因。美国国父们对古罗马的政治跟文化很是欣赏，所以他们看到 Adam Brothers 等其它公司设计的建筑，立即产生了共鸣。尤其是起草《独立宣言》、美国第三任总统的 Thomas Jefferson，他本人就是设计师，并设计了很多自己的建筑，比如给 Virginia 州设计的 Capital Building，就是直接源自罗马建筑。Jefferson 还资助了 Benjamin Latrobe 等设计师，后者参与了同样吸收了罗马元素的华盛顿特区的 Capital Building 的设计。

L16

题目

1. What is the main purpose of the lecture?
A. To show how Wright's design philosophy evolved over time
B. To discuss why some of Wright's work has been misinterpreted by the public
C. To analyze how a common theme in Wright's designs was applied to the construction of a building
D. To demonstrate the difficulties involved in maintaining a building that has a unique design and structure

2. According to the professor, how did Wright make use of boulders at Fallingwater?
Click on 2 answers.
A. As a structural foundation to support the house
B. As steps between the floors in the house's interior
C. As a way to modify the flow of the waterfall during construction
D. As an interior feature serving as a reminder of the exterior landscape

3. What is one student's interpretation of the artistic significance of the concrete balconies?
A. They imitate the arrangement of rocks below the house.
B. They affirm nature as a stronger force than the structures created by people.
C. They serve as a background for reflected light from the waterfall below.
D. They create the illusion that the house is larger than it actually is.

4. Why does the professor mention the polished stone floors in Fallingwater?
A. To provide an example of how Wright rejected an earlier design theme
B. To illustrate how Wright used a natural material to suggest the element of water in his design
C. To identify a material in the house that would not be easily worn down by water
D. To point out that some of the building materials had to be delivered from a long distance away

5. What does the professor say about the construction of the concrete balconies
A. Wright was annoyed with how long it took to construct them.
B. Wright had originally wanted to extend them out farther than they now extend.
C. They were initially designed to be made of steel.
D. They contain more steel rods than Wright had initially planned to use.

6. What is the professor's attitude about the water repairs done at Fallingwater?
A. They would inevitably have been needed because of the building's age.
B. They should not have taken as long as they did.

C. They could have been avoided with adequate planning.
D. They need to be checked on a more regular basis by structural experts.

听力文本

Narrator: *Listen to part of a lecture in an architectural history class.*

Professor: So, we' ll be examining the architecture of Frank Lloyd Wright and the philosophy behind his designs. For Wright, the idea for each building structure had to evolve from and be in harmony with its site, unique geographical quality of this environment. This would be the essence of a philosophy he developed called organic architecture. Out of all his buildings he designed, perhaps the most significant embodiment of that philosophy is the building called Falling water. Here it is. The Falling water is located on a steep wooded site and you can see it' s actually positioned on the bank of a stream above the waterfall. The huge kind of the black boulders you see there? The water froze over them and above that are balconies that extend from the house. You can walk out onto them. Both the floor and the sides of the balcony are concrete. So given Wright' s approach, how did the environment, nature, typically come to play a role in this historical residence?

Well, the first way was the source for the building materials. Wright wanted the house to feel as if it was growing out of the very landscape that surrounded it. Consequently, all of the supporting walls were built using local stones from a quarry right open specifically for the house only 500 feet away. And those local stones were also used on the floors inside the house.

And with stung, well, nature served another role. It actually provided the physical foundation for the overall structure. You see, rather than building a foundation, Wright designed Falling water so what it rests on is actually anchored by several boulders on the stream bank. And

one of those gigantic stones actually rises up and through the middle of the living room.

Female: So it actually comes through the floor?

Professor: Yes. Wright chose to keep that one visible. A powerful way he concisely brought the outside in and made it a focus. The boulder serves as a constant reminder of nature's power and presence.

Male: Okay, but if we're talking about nature's role, I mean, I'm really amazed by the effect of the big balconies, but they're made of concrete. What's natural about that?

Professor: True. But that brings us to another influence of nature as visual inspiration. What do the balconies remind you of? Think about the imagery that's created here.

Male: Well, now that I think about it, visually they do create an effect that... I mean, the balconies are long, rectangular, and flat. And they're kind of stacked, like those slabs of rocks beneath them. It's like they mimic or mirror the rocks that the waterfall spills down over.

Professor: Yes, and Wright was intent on creating effects like that. Another example, I mentioned the stone floors. Those floors have an uneven textured surface. They're waxed and highly polished so they're shiny and reflective. This achieves an intriguing effect. Inside the house it actually looks as though there's moving river water running over the floor stones.

Female: Well, the building's name is Falling water.

Professor: Exactly right. So again, it's nature's role as the visual inspiration. Now, I'm glad you've brought up the balcony because let's move our focus to nature as an obstacle. Wright really had to work against the force of

gravity here. Those heavy concrete balconies extend out well behind the house, an incredible amount of weight to support. To address this, Wright used reinforced concrete.

Female: Reinforced?

Professor: Yeah. Steel rods were placed inside the concrete of the balcony floors for strength. Fairly common now, but at that time Falling water was completed in 1967, this was a relatively new experimental technology.

Now, over the past 70 years, reports have surfaced that the lead engineer infuriated Wright by insisting that the number of steel bars be doubled; twice as many steel bars as Wright had planned. However, the outcome of this theory wasn't confirmed until recently with the use of radar. It looks like the engineer won after all. And according to structural experts who actually had to make repairs to the building, it was a good thing because that single decision has made a huge difference in the balcony's longevity.

Female: You say repair, what had to be done?

Professor: Most people aren't aware of the fact that a lot of work has been done to address water problems throughout the house. Wright didn't install adequate drainage for all those horizontal surfaces. I mean, as I see it, Wright celebrated water and incorporated its beauty, but he should've taken full consideration of its strength.

答案

1. C 2. AD 3. A 4. B 5. D 6. C

文章大意

第一段：教授开篇提到要讲 Frank Lloyd Wright 的建筑以及背后的哲理。Wright 认为，每个建筑必须源自周围环境并与之和谐共处。这种哲理成为“有机建筑”。他设计的建筑中，最能体现这种哲理的叫做“Falling Water”。

第二段： 教授接下来介绍了“Falling Water”位于陡峭的木质场地上，紧靠在瀑布上方的一个小溪堤岸。黑色巨石上有水结冰，在那之上，有从房屋延伸出来的阳台，供人在上行走。阳台的平地跟围栏都是水泥。教授问，基于上面所讲，这个杰作中自然扮演了什么样的角色?

第三段：教授解释，1、建材。Wright 想让建筑看起来就像从环境中长出来一样。结果就是，建造这个房子的承重墙所采用的当地石头，全部来自旁边 500 英尺远的采石场，而这采石场就是专门为这个房子所开发的。2、给整栋房子提供了物理台基。Wright 没有选择建造台基，而是利用小溪堤岸的几个巨石固定房屋，并且其中一个石头还一直伸到起居室当中。女学生提问，是穿过了地板？教授回答，是的，Wright 保留了那个石头，把本是外部的景象拿进室内，使其成为焦点，这个手法很赞。这个巨石不断地提醒自然的力量及其存在。

第四段：男学生提问，既然提到自然扮演的角色，那么大的阳台都是由水泥做的，有什么自然可言？教授说这正是自然的另一个影响：视觉启迪，并问学生，结合创造出来的图景，让你联想到了什么？学生回答，阳台都是长、矩形、平台的，而且还两个叠在一起，就像下面那些石板一样，好像阳台在模仿瀑布流经的那些石头。教授说这正是 Wright 想创造出来的。

第五段：教授提到另一个例子：石头地板。这种地板表面纹理凹凸不平。石头经过上蜡、高度抛光，所以很闪、反射性很好，这个达到了很好的一个效果。从房子内部看起来，就好像有水流经这个石头地板。女学生说房子名字叫“Falling Water”。教授说的确，并再次强调了自然作为“视觉启迪”的作用。

第六段：教授回到阳台，这里他把自然当作了一个“障碍”。教授说 Wright 要对抗重力，那些延伸出来的大阳台，本身很重。为了解决这个问题，Wright 用了强化版的混泥土。学生提问怎么强化？教授教授说里面加了钢筋，来提高阳台地板的强度。这个技术现在很普遍，但是在 Falling Water 建成的 1967 年，还是相对比较先进的。

第七段：教授说过去的 70 年里，有报道说，Falling Water 的主工程师坚持要把水泥里的钢筋加倍，变成 Wright 设计的 2 倍，Wright 对此很气愤。但是让主工程师这么做的假说直到最近用了雷达才有了证据。看起来，主工程师是对的。而且据修缮 Falling Water 的结构专家们所说，单这个决定就延长了阳台的寿命

第八段：女学生提问，那都维修了啥？教授回答，很多人没注意到要让水流经房子需要解决的问题。Wright 没有安装足够的排水孔，教授说他自己认为 Wright 歌颂水，并把水之美融进来，但是 Wright 还需要全面考虑水的力量。

L17

题目

1. What is the purpose of the lecture?

A. To demonstrate that archaeological evidence from ancient settlements can easily be misinterpreted
B. To show how population size can be calculated from pottery shards found at ancient sites
C. To contrast two methods of determining the age of ancient artifacts
D. To contrast methods of archaeological excavation used in Europe with those used in Central America

2. What two features of buildings from the Early Middle Ages does the professor mention
Click on 2 answers.
A. Floors covered with tiles
B. Supporting posts made of wood
C. Walls made of cement
D. Thatched roofs

3. Why is pottery from the Early Middle Ages difficult for archaeologists to find?
A. Because its colors blend in with the earth
B. Because it has broken into extremely small fragments
C. Because it is buried deep beneath postholes
D. Because very few pieces of pottery were made during the Early Middle Ages

4. What does the professor imply about the remains found at Bradley Hill, compared to those found at Yeavering
A. The remains found at Bradley Hill contain clearer evidence of a royal settlement.
B. The remains found at Bradley Hill provide more concrete evidence of the population size.
C. The remains found at Bradley Hill have been more fully revealed in aerial photographs.
D. The remains found at Bradley Hill are more fully described in ancient documents.

5. What is the professor's opinion about the population of Western Europe during the Early Middle Ages?
A. The population probably increased steadily.
B. The population clearly remained stable.
C. The population may have declined, but not as much as is generally believed.
D. The population first rose slightly, then declined dramatically.

6. What does the professor imply about population-distribution maps?

A. They have been found in Mayan ruins.
B. They are extremely well preserved.
C. They are available for only very few regions.
D. They are not always accurate.

听力文本

Narrator: *Listen to part of a lecture in an Archaeology class.*

Lecturer: Last time, we discussed technologies like radio carbon dating and digital imaging that help us interpret archaeological evidence. Now you remember, we looked at some of the challenges of drawing conclusions from the available evidence. One example I want to mention has a strong impact on our ideas about the population size of ancient settlements. In particular - in Western Europe, during the period known as the Early Middle Ages. The Early Middle Ages, from roughly 500 C.E. to 1000 C.E., refers to the period in Western Europe following the fall of the Roman Empire.

Now you remember, the Roman Empire was the major world power about 2000 years ago. At its height, it included all the land around the Mediterranean sea and extended as far north as, well, the island of Britain - and Roman sites have been easy for archaeologists to find. There are ruins of huge buildings like the Colosseum in Rome or even entire cities like the ruins of Pompeii just south of Rome. And when we look across the expanse of the empire, the evidence shows a landscape that was densely populated. In addition to the obvious remains, the huge public buildings and monuments, we see countless remains found in private buildings like statues, decorative artifacts, shards of pottery.

But then, there's a sharp decline in the amount of archaeological evidence that dates from the Early Middle Ages. Now from this picture, it would be tempting to

conclude that there was an equally sharp decline in population but let's look again. As we said, the Romans left behind countless long-lasting remains, items made of materials that were strong, durable. Roman houses for example, were made of mortar and cement - with tile for the roofs. But in the Early Middle Ages, homes were made of organic materials, mostly wood, and they had thatched roofs, simple structures of straw and mud. Materials like these decay over time, so naturally that makes it difficult to find these sites.

Another reason Roman sites are so much easier to locate, is that even small artifacts are visible. Roman pottery for example, it was typically glazed, so it's very shiny and easy to see against the soil. The pottery of the Early Middle Ages were brown or gray, and it wasn't glazed, so you'd have trouble spotting it at an excavation. It's - it' s kind of camouflaged against the soil, so it's easy to draw the wrong conclusions about population size based on the available evidence. I mean let's compare two sites that were unearthed in Britain, one dating from the Roman Empire, the other from a few centuries later, during the Early Middle Ages.

The Roman site is called Bradley Hill. Bradley Hill was a farmstead that would have been inhabited by a few families - so figure about 20 people living there. From this one site, we have remains of a tiled roof and other sturdy materials and thousands, literally thousands of shards of shiny pottery. Now compare that with the settlement in Britain from the Early Middle Ages called Yeavering. We know from writings from that period that Yeavering was the estate of a regional king and that it was occupied by over a hundred people for more than 200 years. But what's left of Yeavering? Virtually nothing. Nothing from the palace, most likely built of wood.

In fact the only evidence we have of that are the post

holes, the holes dug in the earth where the timbers or wooden posts were placed to support the walls and roofs. And we didn't even know about these until aerial photographs revealed markings that weren't evident from the ground. And this is just one example of how a new perspective, in this case made possible through aerial photography, helped us realize that evidence, or the lack of it could lead to false conclusions.

Now look, I'm not saying, I mean, it's possible, even likely that there was some decline. I'm just saying that evidence, especially when it's incomplete, or analyzed in isolation doesn't tell the whole story. Now all this may not seem relevant to this week's reading about the ancient Mayan populations in Central America, which we'll get to in a minute, but you'll notice that your book includes population distribution maps that have been generated based on archaeological evidence. So, a word to the wise, population distribution maps for Western Europe show lots of large empty spaces by the Early Middle Ages, even though evidence like those post holes and documents about Yeavering might paint quite a different picture.

答案

1. A 2. BD 3. A 4. B 5. C 6. D

文章大意

第一段：教授开篇提到上节课讲到的放射性碳测年法跟电能绘图技术如何能帮助我们解读考古证据。本节课要讲的是从已有的证据获得结论的挑战。教授提到中世纪早期（罗马帝国没落后的西欧）的一个例子对我们考量古聚居地人口有重大影响。

第二段：教授介绍了全盛时期的罗马帝国的版图，从地中海北上至不列颠群岛，发现其遗址很容易，有城市遗骸（如罗马的 Colosseum）、也有完整的城市遗迹（如 Pompeii）。教授说证据表明人口蒂朵很大，出来大型公共建筑与纪念碑，还有很多私人建筑（如雕像、装饰品等）。但是从中世纪早期开始，考古证据的数量急剧下降。教授说，看到这个证据，很容易就推测人口数量也经历了急剧的下降。

第三段：教授说罗马人留下来的材料很坚强、持久，并举例罗马人的房屋就是由臼跟接合剂制成，屋顶是瓦片。但是在中世纪早期，住宅却是由有机材料制成（主要是木头），屋顶是由稻草跟泥巴做成的插销式。这种材料的房屋，肯定无法长时间存在。

第四段：罗马遗址很容易找到的另一个原因，在于即使是小型工艺品也是肉眼可见。即使举例罗马陶器，上釉就很有特色：很闪、置于土壤中就很容易发现。但是中世纪早期的陶器却是褐色（或是灰色），也没有上釉，所以发现起来不是那么容易。以至于让人基于此而得出人口减少的错误结论。教授举例 Bradley Hill 发现的罗马时期小农场，才 20 人左右居住。这里发现来坚固的材料，已经成千山万的闪闪的陶器碎片。而在 Yeavering 的中世纪早期的一个小国王的行宫，从历史文献中才得知这里住来上百人，但是几乎啥也没留下，木质的宫殿也早就消失了。仅存的证据只有制成房屋的柱桩坑。而这个证据也是在空中拍到的照片才看到的，而不是从地上。教授说也正是这一证据才让我们意识到有时候证据的缺失可能会让人得出错误的结论。

第五段：教授补充，当然也是有可能人口确实下降了。但是证据不全，或者孤立

开来看的话，会导致结论错误。教授最后总结，希望学生们在看中美洲的玛雅人口分布的文献时，基于考古遗址的人口分布图，可能需要辩证地去看。

L18

题目

1. What is the main purpose of the lecture?
A. To explain how archaeologists identify broken pottery
B. To explain why Mayan pottery is more difficult to classify than other types of pottery
C. To discuss different systems for classifying the shape of ancient pottery
D. To explain why new methods of classifying Mayan pottery are necessary

2. According to the discussion, what can be learned by analyzing ancient pottery?
A. Time periods of contact between different cultures
B. Time periods when certain cultures thrived
C. Locations where pottery was mass-produced
D. Ways of mending broken pottery vessels

3. What is the professor's opinion about classification systems?
A. Many of the current classification systems are confusing.
B. Using only one system could result in an incomplete or inaccurate analysis.
C. New classification systems are needed to replace the current ones.
D. Archaeologists will likely never agree on the best system to use.

4. What point is the professor trying to make when she mentions skiing?
A. Archaeologists must compare the shapes of pottery found at different sites.
B. Identifying similarities between objects is important in archaeological research.
C. Digital photography will soon help archaeologists to document their discoveries.
D. Surface finish is considered an important part of classifying pottery.

5. What does the professor imply about broken pieces of pottery?
A. They can provide more information than unbroken pottery.
B. They are often identified improperly.
C. They are not useful if they are very small.
D. They are usually not worth documenting.

6. According to the professor, why is it often difficult for archaeologists to compare the shapes of vessels from different locations?
A. The surface finish of a lot of pottery is in bad condition.
B. Many ancient pots have never been drawn.
C. Some archaeologists do not share the results of their work.
D. Drawings of pottery do not always contain all the significant details.

听力文本

Narrator: *Listen to part of a lecture in an archaeology class.*

Professor: Let's review. Why is pottery such an important subject of archaeological analysis?

Student: Well, pottery contains more information than you might think.

Professor: Can you explain what you mean?

Female: Well, like certain changes in the style and shape of pottery might help us figure out when certain cultures made contact with each other and borrowed each other's ideas, designs, even technology.

Professor: Good. Today, I want to expand our discussion into the topic of classifying pottery. Classification is simply an attempt to categorize or group the pottery based on specific characteristics. We'll look at ancient Mayan pottery, which as you might know by now is my specialty. Archaeologists have traditionally attempted to classify these vessels by using a single classification system but the complexity, the variation, of ancient Mayan pottery is too great in my opinion to use only one system. I advocate the use of several systems as do some of my colleagues who've been researching the Mayan archaeological sites of Mexico and Central America. By utilizing more than one system of classification, we aren't as likely to neglect important details or lose important information.

Male: So I think what you're saying is when we use a single classification system, we can't label a vessel with lots of details but when we classify it a lot of different ways that gives a more complete picture.

Professor: Yes. And if we're able to label a large quantity of pottery in several ways, we can more clearly see relationships

between them because of having more complete picture of each one. I mean, everybody in this class is from a different state or country. Nobody is exactly from the same place. So if I only classify people by where they' re from, I might say that you have nothing in common. But what if I add more layers? Andrew, you' re a skier. Sara is also a skier. So if we have a classification for your extracurricular activity, we find you two have something in common, snow-skiing.

Male: I get it.

Professor: So we begin by determining what classifications will be possible and what classifications will be useful. These would be in my opinion, the vessel shapes, the surface finish, which looks at texture, and finally what we call paste. I' ll explain paste later. Yes, Andrew?

Male: Would you limit it to just three classification systems? Say, shape, surface finish, paste?

Professor: Not necessarily. When we encounter pottery decorated with a lot of detail, we might want to add a classification system for this, too. One we could call decoration. So, let' s look at my first classification type: pottery shapes. We need to consider the basic proportions and size of an object.

Female: But what if the object is broken?

Professor: Obviously, intact pottery is the best but if all we have in front of us is a collection of pieces, as long as those pieces are of a reasonable size, we can still classify shapes reliably. We just have to reconstruct the object. Now, even if you' re able to reconstruct and then determine how to classify pottery in term of its shape, you might be unable to classify its surface finish. For instance, with many with the pottery collections found at the archaeological site of

Flanke, too little surface finish was preserved to make a determination. You know, really what we need are comprehensive and accurate illustrations of ancient Mayan pottery. Having drawings of their profiles allows us to compare the shapes of pottery found at archaeological sites because of course, we can't personally go to all the locations. But even when archaeologists and art historians do attempt to illustrate every single piece, there are problems.

Female: Like, three different people might draw the profile of the same pot but the drawings don't turn out to be exactly the same.

Professor: Very true. Illustrating involves some simplification of the pottery. And people may have different ideas of which features are important to keep in the drawing and which can be left out. What else?

Female: Well, drawing the profile of every single pot probably takes tons of time so it can be expensive.

Professor: Uh-huh.

Female: But digital photography is so popular and inexpensive now. Why don't we just give up on drawings and make a collection of photographs? You can't get more accurate than a photograph.

Professor: That's a natural question. I'll get to that in a second.

答案

1. C 2. A 3. B 4. B 5. C 6. D

文章大意

第一段： 教授开篇提问为啥陶器对考古分析具有很重要的价值？学生说，因为陶器能包含你想象不到的信息。女学生说比如风格、造型的改变可能会帮助理清某些文化何时相互接触、并借鉴了对方的想法、设计甚至技术。

第二段：教授说本节课讲陶器分类。他专长玛雅陶器。考古学家们长期以来想用单个分类系统分类玛雅陶器。但是古玛雅陶器变化繁多，单一系统不足以覆盖，所以教授及其在玛雅遗址调研的同事推荐多种分类系统，这样不至于遗漏重要信息。

第三段：学生询问教授的意思是不是说，单一分类系统不能给一个陶器贴很多标签，而多个系统能展示更清楚？教授说是的，并补充如果能多种分类，能看清各个器皿之间的关系。老师举例班上同学，他们来自不同州，如果就以来自哪里把同学们分类，就会发现他们毫无共同点。但是再加几层就不一样了，比如课外活动，会发现 Andrew 跟 Sarah 都喜欢滑雪。

第四段：教授接下来讲怎么决定分类标准，他提了三个：造型、表面收尾跟材料。学生问就这三个吗？教授回答不一定，如果遇到一个陶器有很多细节，就可以加进去一个装饰分类标准。

第五段：造型。需要考虑到物件的比例跟大小。学生问如果物件损坏了呢？如果碎片足够大，可以把碎片重组，再按造型分类。但是可能无法按表面收尾处理分。教授举例，在 Plaikai 就没有表面收尾处理被保存下来。所以古玛雅陶器的分类需要复杂、精确的图案，这样可以让我们比较不同地点发现的陶器的造型。

第六段：但是不同的人对同一个陶器图案进行再现，结构却不一定相同，因为再现时需要对图形进行简化，而不同人的见解不同，哪些保留哪些去除结果就不一样。另外，再现耗时很长，也很贵。学生问为什么不拍照？这样既便宜也更精确。老师说后面讲。

L19

题目

1. What is the main purpose of the lecture?
A. To describe some problems associated with nanomaterials
B. To explain why new materials are needed for making semiconductors
C. To describe properties of a recently developed nanomaterial
D. To describe experiments that measured the strength of graphene

2. What similarity between graphene and diamond does the professor emphasize?
A. Both have a simple atomic pattern.
B. Both are extremely expensive.
C. Both are poorer heat conductors than silicon.
D. Both have natural and synthetic versions.

3. Why does the professor mention adhesive tape?
A. To give an example of a potential application for graphene
B. To explain how the first sample of graphene was obtained
C. To suggest that nanomaterials are sometimes found in unexpected places
D. To make a point about the flexibility of graphene

4. What does the professor imply about silicon?
A. It cannot be replaced by a synthetic material.
B. It can be used in combination with graphene.
C. Its conductivity is similar to graphene's.
D. Its usefulness for new electronics is limited.

5. According to the professor, what problems must researchers solve before graphene can be used commercially?
Click on 2 answers.
A. How to attach graphene to existing semiconductors
B. How to mass-produce large sheets of graphene
C. How to regulate graphene's electrical conductivity
D. How to prevent graphene from sticking to surfaces

6. Why does the professor say this:
To suggest that the scientists lacked experience
To explain scientists' surprise about graphene's structure
To emphasize the difficulty of such a project
To encourage students to offer their suggestions

听力文本

Narrator: *Listen to part of a lecture in a materials science class.*

Professor: So basically, a nanomaterial is an extraordinary thin sheet of material, often a film or an engineered surface sometimes that's less than five atoms thick. There is a number of different nanomaterials out there right now but the one I'd like to focus on today is graphene. Now, I like graphene because there's a number of exciting applications where it may prove very useful. As the name suggests, graphene is derived from graphite, the stuff in the quart of pencils. Graphite is made of layers of carbon atoms and if you strip off the thinnest possible layer of graphite, a layer of just one atom thick, you've got graphene. Graphene is the strongest material ever made. Its strength is due to its perfect crystalline atomic structure, which looks like chicken wire under a microscope, actually. You could compare graphene to diamond because they're both made of carbon atoms that are arranged in a simple and regular pattern. But unlike diamonds, graphene is incredibly flexible, akin to plastic wrap. And because of its atomic structure, graphene is also an outstanding heat conductor. Electrons speed through this material much faster than they can through other materials.

It's been a few decades since graphene was first identified as a potential nanomaterial in 1947, to be precise. Some scientists came up with the idea that a material like this can be used in a variety of ways but others are skeptical because really, how do you make a sheet of material that's just one atom thick? In the 1980s and 90s, many researchers tried to produce graphene with little success. But finally, in 2004, a group in Manchester, England created the first graphene sample by simple mechanical exfoliation. Basically, they placed a small piece of graphite between two pieces of adhesive tape, pulled the tapes apart and repeated this process over and over

until they had extracted a layer that was just once atom thick. And this news excited the scientific community because now it meant the graphene could be investigated not only theoretically, but also experimentally. When experiments revealed the high mobility of electrons through graphene, this material became particularly promising in the field of electronics. It might be used to make transistors and computer microchips. As you know, the development of microchips and transistors has been based on silicon for more than forty years. Silicon was the material that allowed us to create ever faster and smaller microchips which transformed computers from huge machines to small portable devices. But, as mobile phones, music players, and other devices keep getting smaller and faster, we’ re now pushing the capacity of silicon so we hope that graphene can eventually replace silicon as a semi-conductor.

But there’ s another challenge: the industrial of graphene sheets. The adhesive tape method is good for producing small samples for research purposes. But we need a reliable way to mass produce graphene in large sheets so they can be sold to companies that manufacture transistors, for example. And several groups are investigating ways to do this, to make large quantities of graphene cost effectively. As you know, a semi-conductor is a material that delivers electrical charges between electrons. Recall that the basic units of digital information are ones and zeros. One moves means that there is a signal and there is no signal. And this is the way you code and transmit data digitally. So, the basic rule for a semi-conductor is that it can convey a signal, but this signal can also be stopped. And here is one problem with graphene. It’ s too good a conductor. Its conductivity is so good that the signal cannot be turned off. So, we’ re investigating ways to control graphene’ s conductivity to halt the throe of electron through this material.

答案

1. C 2. A 3. B 4. D 5. BC 6. C

文章大意

第一段： 教授开篇提到纳米材料很薄，厚度可不足 5 个原子。有很多种不同的纳米材料，今天要讲的是 graphene（石墨烯）。

第二段：教授说石墨烯能应用在很多实用的地方。石墨烯来自石墨，就是铅笔芯用的那种。石墨由多层碳原子组成，从其中剥出最薄的一层（1 个原子厚）就是石墨烯。石墨烯材质最坚硬，这是由于其水晶状的原子结构，在显微镜下看起来像是铁丝织网。跟钻石一样，石墨烯的碳原子组成的图案单一且规则。但是跟钻石不一样的是，石墨烯非常灵活，有点像塑料包装纸。另外，由于其原子结构，石墨烯的导热性非常强，电子通过这个材料的速度比其它材料要快得多。

第三段：1947 年石墨烯首次被认证为潜在的纳米材料。自那以后，一些科学家认为它的应用前景无限，一些科学家则怀疑，因为 1 个原子厚的材料无法制作出来。上世纪 80、90 年代制作石墨烯的尝试无功而返。但是直到 2004 年，英格兰的曼彻斯特市的一个团队，用简单机械剥落的方法成功做出首个石墨烯样本。他们把一小片石墨放在两片粘胶之间，粘胶拉开，如此反复，直到石墨厚度只剩 1 个原子厚。

第四段：这个消息让科学界位置兴奋不已，因为这意味着石墨烯可以在实验室里研究了。当后续试验表明电子在其中超强的运动能力，石墨烯就变成了电子界的宠儿，可以用它来制作晶体管跟电脑芯片。教授说过去 40 年，这些东西的制作都是靠硅。硅能让我们制作出更快更小的芯片，从而让电脑变得越来越小。但是

随着移动电话等设备变得越来越小、越来越快，我们正面临硅的能力界限。所以，教授说石墨烯的出现，带来了希望，说不定可以代替硅来做半导体。

第五段：教授说，要做到这一点，还是有挑战的。上面提到的粘胶法用来做石墨烯的小样品是 OK 的，但是要卖给晶体管公司，必须规模生产大片的石墨烯才行。有几个团体已经在研究划算的生产方法了。半导体的作用在于在两个电子见传递电流。电子信号的基本单位是 0 跟 1，1 代表有信号，0 代表没有信号。我们就是这样来写代码并传输电子数据的。教授总结说，半导体的基本运作原理是可以传递电信号、也可以不传递。但是石墨烯的传递性实在太强，我们没办法让其不传递。所以目前还在研究怎么关闭它的传递。

L20

题目

1. What is the lecture mainly about?
A. Special techniques used in climate research
B. Some of the effects of reducing the density of clouds
C. Methods companies use to reduce their greenhouse gas emissions
D. A method for reducing the amount of solar radiation reaching Earth

2. According to the professor, what is the objective of cloud brightening
A. Increasing rainfall in some areas of the world
B. Increasing the reflective power of clouds
C. Reducing the number of clouds over the oceans
D. Reducing the amount of particles in the atmosphere

3. According to the professor, what are the advantages of using Flettner rotors on albedo yachts?
Click on 2 answers.
A. They are more resistant to strong winds than sails are.
B. They are easier to install on a ship than sails are.
C. They can be used to measure the density of clouds.
D. They can serve as spouts for the seawater mist.

4. Why does the professor discuss the size of water droplets?
A. To explain that larger droplets attract more water vapor
B. To explain the evaporation rate of droplets
C. To illustrate the difficulties in designing a spray system
D. To point out differences between salt water and freshwater

5. Why does the professor mention silicon?
A. To explain why certain materials deteriorate in salt water
B. To introduce an idea for making tiny holes to be used in producing droplets
C. To express doubt that the required number of droplets can be produced
D. To point out the importance of computer models to the project he is discussing

6. What is the professor's attitude about the usefulness of cloud brightening
A. He is convinced that cloud brightening will be very effective.
B. He doubts that the problems involved in developing the technique can be solved.
C. He is concerned that cloud brightening could have unintended consequences.
D. He thinks geoengineers should focus more on repairing the ozone layer than on cloud brightening.

听力文本

Narrator: *Listen to part of a lecture in an environmental engineering class.*

Professor: Today, I' d like to discuss a branch of environmental engineering called geo-engineering. The main goal of geo-engineering is to control global warming, to counteract the warming effect of emissions of greenhouse gases are causing. Greenhouse gases make it more difficult for Earth to radiate heat energy into space. So to counteract this effect, geo-engineers are trying to come up with ideas to reflect more of the sun' s radiation back into space. Not all ideas seem realistic, but one stands out as a possibility. And that' s clouds brightening. You see, we know that clouds are already great reflectors of sunlight so making them even more effective make sense, right? Well, that' s what cloud brightening means to accomplish. It' s believed that spraying clouds with sea water mist may increase the density of clouds in the air, making them brighter. Why sea water mist? Jonathan?

Jonathan: Because sea water maintains salt?

Professor: Exactly. The assumption made is that the mist would dry out, leaving salt particles behind. The water vapor in the cloud would then condense on these salt particles, forming denser clouds. The whole theory is that the salt particles will be more efficient at attracting water vapors than existing particles in the atmosphere over the open ocean. And this would make the clouds brighter, which in turn would increase their reflectivity.

Female: But how would they do that? I mean, spraying clouds with sea water.

Professor: Engineers have thought about how they could spray this mist into the air and came up with an idea for ships called albedle yacht. Now, remember albedle is the term for the

reflective power of the surface to a body, such as a cloud. Basically, these albedle yachts would be set out to the ocean to create sea water mist. They' d be remote controlled and wind powered. They wouldn' t use traditional sails, instead they' d use Flattner rotors.

Flattner rotors are tall tubes that spin in the wind, causing the ship to move perpendicular to the wind. It' s a proven technology. These spinning tubes can be powered by just wind but unlike conventional sails, these tubes won' t get damaged by strong wind. Also, a seawater spout system could be installed inside these tubes. And that would spray saltwater droplets into the atmosphere as the tubes spin. Now, as promising as the albedo yacht might sound, this idea does have its obstacles. Probably the biggest problem is how to design the system to create the spray. You see, these droplets that will be set up to the clouds need to be very small. In order to attract a lot of water vapor, each droplet can' t be more than two microns across. In case you' re wondering, two microns is about the size of bacteria and that' s not all. These droplets all have to be the same size so that they won' t clump together. If they do, then that might result in rain, making the cloud dissipate which is the opposite of what we want. We want the clouds to get bigger, not smaller.

One idea is to force water through tiny holes, like a watering can. The only problem with this is that it would require drilling 1.5 billion tiny holes in some material for this to work. Engineers could use silicon, which has been used in micro-electronics for many years, since there' s a track record of creating tiny devices like computer chips with silicon, they figure it could be the appropriate material for tiny holes. But experiments have shown that more problems need to be solved before going forward, such as how to prevent these holes from clogging.

Male: But when all these problems are ironed out, is it going to

work?

Professor: Well, cloud brightening might be the most promising technique so far. But there' s nothing that says it will definitely work. And even if it did work to some extent, who knows what' s going to happen? Making these bigger clouds could backfire and cause less rainfall in some places and it could cause ocean currents to change. We don' t even know if these particles could have a negative effect on the ozone layer so there are potential dangers on the global scale.

答案

1. D 2. B 3. AD 4. C 5. B 6. C

文章大意

第一段： 教授开篇提到 geo-engineering（生态工程学），说其主要目标是解决温室气体排放带来的温度上升的问题。温室气体减弱了地球向外太空反射热能的能力，所以生态工程师就想着怎么才能抵消这一影响。

第二段：教授说，又一个想法看起来可行性不错："亮云计划"。云本身能很好反射太阳光，要是能增强它的反射能力，岂不是可以解决前面提到的问题了吗？怎么提高云的反射能力呢？工程师们想到了往云上喷海水雾，以提高云本身的密度，使其更亮。

第三段：教授问 Jonathan，为啥要用海水雾？Jonathan 回答说因为里面含盐？教授说正是如此。工程师们的设想是，雾会干掉，盐分就留下来了，而盐颗粒要比云里面的其它颗粒更能吸引水蒸气，并使其凝结，云因此就会变厚、变亮，从而提高云的反射能力。

第四段：女学生提问，那要怎么才能往云上喷海水雾呢？教授说，工程师们想到用遥控、风力推进的“反射艇”（albedo yacht），把“反射艇”派到海上去创造海水雾。教授说，“反射艇”不用传统的风帆，用的是 Flettener Rotor。这是靠风转动的高管子，能使船以垂直于风的方向行走，而且管子不会被强风所毁，这点跟风帆技术不同。新技术已经得到证实。教书说，另外，管子里可以安装海水喷射系统，这样在管子转动的时候，就可以朝大气喷射海水珠。

第五段：技术说这个方法也有问题。最大的问题是如何设计这个喷洒系统，因为要吸引水蒸气附着，这些海水珠必要很足够小才行—直径不能超过 2 微米。教授说，2 微米差不多就是一个细菌大小。此外，这些水珠必须得一样大小才行，不然水珠会聚集起来，那样的话，就会形成降雨，降雨会让云变小变稀。而我们需要的是云变大。

第六段：教授说一个方法就是让水通过一些小孔，就像洒水壶一样。唯一的问题在于这可能需要我们钻 15 亿个小孔才行。工程师们可以用硅，因为用硅做的电脑芯片可以变得很小。但是研究下来，发现还有很多问题要先解决，比如怎么组织这些孔被堵住。

第七段：男同学提问，那这些问题如果解决了，设想就能成功吗？教授回答说，目前来说“亮云计划”可能是最有希望的了。但是没人能保证一定能行。即便它某种程度上能成功，谁知道又会发生什么？说不定，云变大了，会导致某些地方雨变少，而这会改变洋流的变化。教授总结，我们甚至不知道这些盐颗粒会不会对臭氧层有消极影响。所以都是全球性的潜在危险。

L21

题目

1. What is the lecture mainly about?
A. Ways that ethanol reduces pollution in the United States
B. Ways that ethanol production has changed agriculture in the United States
C. The advantages and disadvantages of producing ethanol from corn
D. Efforts to replace all gasoline used for transportation with corn-based ethanol

2. What does the professor imply about the industrial-scale production of ethanol in the United State?
A. It is the best option for future energy production in the United States.
B. It is a model for ethanol production in other countries.
C. Its efficiency is likely to improve in the near future.
D. It is energy intensive and inefficient.

3. What does the professor say about natural gas
Click on 2 answers.
A. It is required to make fertilizer for corn.
B. It could eventually be replaced by ethanol.
C. It is used to refine corn-based ethanol.
D. It is released when corn ferments.

4. What point does the professor emphasize when she discusses pipelines?
A. Pipelines cannot be used to transport ethanol.
B. Some countries already have extensive networks of ethanol pipelines.
C. Pipelines formerly used for gasoline could be adapted for ethanol.
D. The building of ethanol pipelines poses risks to the environment.

5. Why does the professor mention parts of the corn plant that people eat
A. To make a point about the cost of growing corn as a food crop
B. To call attention to a potential conflict between uses of corn
C. To describe how ethanol was discovered
D. To indicate the part of the corn plant that is not used to make ethanol

6. What is the professor's opinion about ethanol production in Brazil?
A. It cannot be done on a large-scale basis.
B. It has increased the price of sugar around the world.
C. It is a better model than the one being used in the United States.
D. It has not received the positive attention that it deserves.

听力文本

Narrator: *Listen to part of a lecture in an environmental science class.*

In research years, there's been a lot of attention paid to the use of ethanol as a supplement for gasoline in the United States. And for those of you who don't know what ethanol is, let me just explain. Ethanol is simply a kind of alcohol. And the ethanol added to transportation fuel in the United States comes primarily from corn. Basically, you harvest the corn, ferment it to turn the silvergenic into alcohol, and then distill the alcohol to concentrate and purify it.

As I was saying, ethanol is used extensively in the US today as an additive to gasoline. Ethanol supplies energy in the same way gasoline does in an internal combustion engine. Mixing some ethanol into gasoline means that you don't burn as much gasoline to run your car because some of what is burning is ethanol instead.

So, what are some benefits of using ethanol as a transportation fuel? Well, it's renewable. It's not a fossil fuel where you pump it out of the ground and sooner or later it's all gone. Also, there's much less emission of carbon dioxide when you burn ethanol as a fuel versus as burning gasoline. However, the current US program of using ethanol as a gasoline supplement doesn't really make a lot of sense from the point of view of environmental impact and energy efficiency. First, a liter of ethanol doesn't have as much energy as a liter of gasoline. It's got about one third less energy in fact. So you need more ethanol to go the same distance in your car as gasoline. Also, although ethanol is a green fuel because corn could be replanted year after year, creating ethanol from corn is actually quite energy intensive. I mean, if you know anything about agriculture in this country, you know it's not just sowing some seeds in the

spring, waiting then harvesting the results in the fall. Farming takes fertilizer, lots of fertilizer and currently it takes up fossil fuel, natural gas, to produce that fertilizer and to refine the ethanol, too.

Industrial scale ethanol production, you have to heat giant vast of mass corn using natural gas first to prevent the corn and then to distill and purify the ethanol and you have to haul it in tanker trucks which run primarily on fossil fuel and oil. You can transport oil through pipelines. But ethanol cannot be sent through pipelines because if it accidentally gets mixed with water, it' s useless. You' d have to distill it all over again. And it' s impossible to make a long pipeline that doesn' t leak a little bit of water. There' s various calculations out there but there' s a general agreement that a lot of energy goes into the production and distribution of corn based ethanol in this country. It probably takes about three quarters of a unit of fossil fuel energy to get one unit of ethanol energy.

The other thing about ethanol production as it' s done here is that it uses only the corn kernels, the part we eat so the more corn used to produce ethanol, the less food you have. Now, at the moment you know, we' ve decide that this is okay in this country. But there could come a time where we' re no longer comfortable doing that; using corn that could be feeding people to you know, fuel our vehicles instead. So does this all mean that trying to produce ethanol as a fuel is never a good idea? No. That' s not what I intend to say here. In fact, there are other parts of the world like Brazil especially. They use ethanol in Brazil, too. But their ethanol is made from sugar cane. It' s just so much less energy intensive to grow sugar cane in the tropics than it is to grow corn in the American Midwest. Yeah, there are some environmental tradeoffs to sugar cane cultivation, too. But that' s a topic for another day.

答案

1. C 2. D 3. AC 4. A 5. B 6. C

文章大意

第一段： 教授开篇提到乙醇（ethanol）在美国收到很大关注，被认为是汽油的替代品。乙醇是一种酒精。美国往燃料里加的乙醇，主要来自玉米。玉米收割后，发酵，淀粉就会变成酒精，再蒸馏、冷凝、提纯。目前在美国，乙醇作为一种燃料添加剂，其再内燃机里的工作原理与汽油完全一致，把乙醇加入燃油，意味着车会减少汽油的消耗。

第二段： 那把乙醇作为燃料，有哪些优点呢？教授说，这个可以再生，不像石油，早晚会枯竭。另外，它排放出来的二氧化碳没那么多。

第三段：但目前从环境影响跟能量效率来说，目前把乙醇当作燃油添加剂这种政策没啥道理，因为一升的乙醇产生的能量比不上一升的汽油，只有后者的 1/3。所以，同等距离下，你烧的乙醇更多了。另外，乙醇虽然是可再生能源，但是玉米的生长过程需要很多化肥，而化肥的生产需要石油、天然气。

第四段：教授说，工业用玉米生产乙醇，是能源集中型。你得先把一大堆的玉米用天然气加热，随后要蒸馏，还要用烧汽油的油罐车拖运。石油可以用管道运输，但是乙醇不行，因为一旦与水接触，就完全没用了。又得在蒸馏一遍。而我们无法做到完全不漏水的管道。制作、运输乙醇所花的能量巨大，据估算，3/4 个单位化石燃料能量的投入才能换来 1 个单位的乙醇能量。

第五段：玉米生产乙醇的另一个问题在于它只用到了玉米的内核，所以用于制作

乙醇的玉米越多，你能吃到的玉米就越少。可能目前看来，这么做没啥大问题，但是可能将来要吃饭的人多了就没办法了。

第六段：教授说，并不是说用乙醇作为燃料不可行。巴西也用乙醇燃料，但他们用的是甘蔗来提取乙醇的，在热带地区种植甘蔗，要比在美国中西部种玉米要消耗少得多的能量。种植甘蔗也有一些环境上的权衡，但那是另一节课要讲的。

L22

题目

1. What is the lecture mainly about
A. Using the Farnese Atlas to prove one of Hipparchus' theories
B. Finding evidence of a star catalog in an ancient statue
C. The rediscovery of an ancient method of astronomical calculation
D. A theory about the use of star catalogs by ancient astronomers

2. What astronomical discovery is attributed to Hipparchus
A. The speed of Earth's rotation is slowing.
B. Over time, a star's position in the sky appears to change.
C. A star's magnitude depends on its position in the sky.
D. Constellations do not look the same when viewed from different positions on Earth.

3. Why does the professor mention the position of Polaris, the North Star?
A. To help explain how astronomers measure the relative positions of stars
B. To help explain how star catalogs have evolved over time
C. To help explain why different stars are seen from different locations on Earth
D. To help explain why the sky looks different at different times in history

4. What evidence is provided to support the researchers' conclusions about the globe on the Farnese Atlas
Click on 2 answers.
A. The observer's location could be calculated from constellations on the globe.
B. References to the constellations appear in a collection of ancient Greek myths.
C. Hipparchus' star catalog was compared with an earlier star catalog.
D. It was determined when the constellations would have been in the positions depicted on the globe.

5. Before the most recent discoveries, what was generally believed to be the source for the Farnese Atlas?
A. Astronomical calculations made by the statue's sculptor
B. A star catalog by an astronomer who lived before Hipparchus
C. A poem that was written many years before Hipparchus' star catalog
D. Ancient Greek myths that gave names to all the constellations

6. What is the professor's attitude toward the new research he presents on the Farnese Atlas?
A. He is surprised that the statue taught modern astronomers about star movement.
B. He prefers an older theory about the constellations on the statue.
C. He is skeptical that the statue can be connected to Hipparchus' star catalog.

D. He finds it interesting that Hipparchus' own discovery aided the researchers.

听力文本

Narrator: *Listen to part of a lecture in an astronomy class.*

Professor: Okay, we're going to be looking through a number of star catalogues throughout this course because they're important tools for astronomers. A star catalogue is a list of information about stars, information like its position in the sky, of course, and magnitude, which is its brightness. From historical perspectives, star catalogues are interesting because they tell us how much past astronomers knew and what they saw. One of the first star catalogues was produced by the Greek astronomer Hipparchus. This was around 129 BCE. That was an amazing accomplishment at the time and incredibly influential. Unfortunately, the Hipparchus star catalogue was lost along with most of his other writings. But we still know something about him. Hipparchus, if you still remember from our other discussions, was credited with a number of other important discoveries including precession of the equinoxes. Now, if you remember what precession is, yes, Jane?

Jane: It's the idea that the stars shift positions in the sky over thousands of years.

Professor: As you'd commerce, yes. Why?

Jane: Because the Earth doesn't rotate perfectly. It wobbles a little, right?

Professor: Yeah, because the Earth wobbles on its axis. Over time, the stars appear to move across the sky in relation to some fixed point. For instance, Polaris, what we call the North Star, is just above the North Pole now, but it will appear further and further away from it over time. It will, however, be back to the same position when the cycle completes in

twenty-six thousand years. So, it was quite a discovery considering what Hipparchus had available to him. Anyway, precession of the equinoxes is important because using calculations based on precession, we can determine the position of the stars for any given date in history, but as I've said, we thought Hipparchus star catalogue was lost. Well now, it appears that the catalogue may be represented on the globe on an ancient Roman statue called Farnese Atlas, which is a copy of an even older Greek statue.

In ancient Greek mythology, atlas is the God that holds up the world, right? Well, the globe that Atlas is holding up here shows the ancient Greek constellation. Not the individual stars, but the figures they represent like Aries the ram and Hercules the hero. Anyway, the big news now is that well, some researchers have concluded that the original sculptor may have use Hipparchus' star catalogue as a source of information in creating the sculpture. How did they figure this out? Well, we know the position of the stars where they are in the sky today, right? Well, by mentioning star positions on this globe, and then making calculations based on the precession of the equinoxes…

Male: Wait, wasn't that Hipparchus' discovery? You know, precession?

Professor: That's right. And by measuring the star positions on the globe and making the calculations, researchers have determined that those star positions correspond to the way the sky looked around 125 BCE. Now, that date, 125 BCE, corresponds to when Hipparchus created his star catalogue, around 129 BCE which is definitely within the margin of error. Now, here is something else about the Farnese Atlas. The constellations on the globe appear on a grid of circle, the standard lines we see on modern globes. So there's of course the Equator, the Tropics of Cancer

and Capricorn, as well as the Arctic and Antarctic circles.

Male: And that helped us tell where the constellations are, or were, right?

Professor: Yes, of course. The constellations are placed according to these. But we can also pretty much place the observer's position on Earth based on the latitude of the constellation and their positions on the globe and guess what? After we make those calculations, this places us just where?

Jane: Well, in Greece of course.

Professor: Yes, but in the specific part of Greece where Hipparchus lived. Now, it's exciting to think that even though his catalogue was lost, we may have at least a concrete record of it. As I've said, this is big news because until now, the theory, the general consensus, was that the sculpture had relied on information about the constellation found in a famous poem, a poem that predates Hipparchus by more than a hundred year so this discovery may change all that. But I suppose I should stress, this is only a theory and there are skeptics. But if the globe does turn out to be connected to Hipparchus, well, the beautiful part about this is that it will have been Hipparchus' own discovery of precession of the equinoxes as Jim pointed out that will have made it possible to trace the connection.

答案

1. B 2. B 3. D 4. AD 5. C 6. D

文章大意

第一段： 教授开篇提到恒星目录对天文学家很重要。恒星目录包括恒星的一些信息，如在天空中的位置、光度等。从历史角度来说，恒星目录很有意思，因为

这能告诉我们过去天文学家们知道多少，以及他们看到了什么。

第二段：教授说其中历史上首批恒星目录之一就是由希腊天文学家 Hipparchus 与公元前 129 年记录的。当时来说，这是很了不起的，也很有影响力。不幸的是，跟 Hipparchus 其余作品一样，这部恒星目录已经遗失了。但关于其人，我们还是知道一些。

第三段：教授提到 Hipparchus 有很多贡献，这其中包括岁差（precession of the equinoxes）。Jane 解释说，precession 就是千百年来，天上的星星移动位置的观点。其原因在于，地球会绕着地轴晃动。时间久了，恒星在天空中出现的位置会变化。教授举例北极星，现在刚好在北极正上方，但是它在若干年之后会离北极越来越远，然后又会原来越接近北极。这样一个循环差不多需要 2 万 6 千年。所以考虑到 Hipparchus 手头上有的资料，能发现这一点是很了不起的。

第四段：岁差很重要，因为它是基于 precession 的计算，我们可以计算出历史上任何时候的恒星的位置。但是我们曾以为 Hipparchus 的恒星目录已经遗失了。但是现在看来，这个目录可能被刻在了古罗马一个球体上了，这个球体叫“Farnese Atlas”，这个球体是一个更老的希腊雕塑的复刻版。教授说，在古希腊神话中，Atlas 是撑起世界的神。他撑起的那个球现实的是古希腊的星座图。虽然不是每个具体的恒星，但是它们代表的人物，如白羊 Aries，英雄 Hercules 等。研究人员已经知道这个球体的原作者可能以 Hipparchus 的恒星目录作为参考资料。那研究人员是怎么知道的呢？教授说，我们可以根据现在恒星的位置，再找到那个球体上星星的位置，再依据岁差的计算。

第五段： 男学生提问，precession 不是 Hipparchus 的发现吗？教授说是的，通过测量球体上恒星位置，再计算，公元前 125 年夜空中恒星的位置大致就能确定了。而公元前 125 年这个年份，跟 Hipparchus 做出恒星目录的公元前 129 年，相差无几，在计算误差幅度之内。

第六段：教授说 Farnese Atlas 还有一点要注意。球体上星座是成圈出现的，这个跟我们现在实用的球体很像。那个球体上有赤道、北回归线、摩羯宫、北极圈和南极圈。男学生问，这就告诉我们星座的位置了吧？教授说没错。星座就是这样据此排列的。但我们也可以由星座的纬度、在球体上的位置反推出观察者的位置，最后发现这个位置刚好是 Hipparchus 生活过的地方。所以，得出这个结论就很令人激动了，尽管没了那部恒星目录著作，我们却是找到那个作品的记录。而此前的共识是，这个雕塑依靠的是一首著名诗歌里关于星座的信息而做的，这首诗歌早于 Hipparchus1 个多世纪。所以，上面这个结论可能就能推翻这个共识。

第七段：教授总结，当然目前这还仅仅是理论，也有怀疑的人。但是如果这个球体真的跟 Hipparchus 有关，就能说明是他自己发现了岁差，从而让我们能建立联系。

L23

题目

1. What is the main purpose of the lecture?
A. To broaden students' understanding of an astronomical concept
B. To discuss the significance of some constellations to ancient cultures
C. To introduce students to a recent decision the IAU made
D. To examine the controversy over the exact number of constellations

2. Why does the student mention Orion?
A. To explain how she became interested in astronomy
B. To point out that the pattern of stars in a constellation can be difficult to identify
C. To give an example of a constellation named after a mythological figure
D. To ask a question about the names of constellations

3. According to the professor, what used to be a problem for astronomers when a new star was discovered?
A. Determining whether the new star could be part of an asterism
B. Ranking the new star's importance among the stars that are visible through telescopes
C. Describing the new star's location so that other astronomers could find it
D. Convincing the International Astronomical Union to accept the name proposed for the new star

4. According to the professor, what were the accomplishments of the International Astronomical Union in the 1920s?
A. Assigning scientific names to the traditional constellations
B. Determining the approximate number of stars in each constellation
C. Deciding which star configurations should be considered constellations
D. Dividing the night sky into well-defined regions

5. What is the professor's attitude when he mentions the IAU's decision about the Big Dipper?
A. He is unsure why the Big Dipper received more attention than it deserves.
B. He is disappointed that the Big Dipper was classified as an asterism.
C. He regrets that the decision has created confusion within the field of astronomy.
D. He is gratified that the IAU is willing to reconsider its decision.

6. What does the professor imply about the Big Dipper?
A. It got its name at the same time as Ursa Major did.
B. It is the most visible part of Ursa Major.
C. It is part of the smallest constellation.
D. It can point the way to an important star.

听力文本

Narrator: *Listen to part of a lecture in an astronomer class.*

Professor: Most people' s idea of a constellation and a professional astronomer' s idea of a constellation are not quite the same. Okay, so let me ask. What is a constellation? Cathy?

Cathy: A group of stars that form some kind of pattern.

Professor: Yes, a recognizable pattern formed by stars. That' s what some non-astronomers call constellations. Constellations often have names derived from ancient legends and myths. How about an example?

Cathy: Okay. Orion?

Professor: Good. That' s a prominent constellation. Let' s take a look at Orion. The name refers to a hunter in Greek mythology. Orion is easily visible in the night sky from November to February where it' s winter in the northern hemisphere and summer in the southern hemisphere. This relevantly simple configuration gives just a handful of scholars a great example of the very public notion of a constellation and modern astronomers' conception of a constellation grew out of these constellation figures. What happened was, for millennia, people around the world noticed these star patterns and made up stories about them and gave them names. And then, as the astronomy developed into science, especially after the invention of the telescope, astronomers started discovering lots of new stars and when they named the new stars to help communicate its location to other astronomers, they named it based on the nearest constellation. So, for astronomers the stars became part of that constellation. But a lot of newly discovered stars were located between two constellations. So how do you name these if you don' t know where one constellation ends and the next begins? So in the 1920s the International Astronomical

Union, or IAU, came up with an official list of 88 constellations. The IAU first had to agree on a list of constellations that combined traditional constellations with constellations that had been established more recently. Then they defined precise boundaries for each constellation. They were drawn along vertical and horizontal lines similar to the coordinate system we used to describe location here on Earth. The boundaries organize the entire sky as seen from the Earth into 88 contiguous regions and it's in these regions that the astronomers use the term constellation. Some of these constellations are very large. Others are very small and not all of them correspond with our traditional constellation. Let me give you an example. One constellation the people in the United States probably think of first when asked to name a constellation?

Cathy: Is it the Big Dipper?

Professor: Right, the Big Dipper, also known as the Plough, or the Wagon. The grouping of seven bright stars visible throughout the year in the northern hemisphere but what most people don't know it's actually not called a constellation by astronomers. It's called an asterism. You can clearly see the boundaries of the constellation and there's the Big Dipper. Its seven stars are connected by lines that form its bowl and its long handle, and they are the brightest stars in Ursa Major. Now, look at the two stars in the bowl and the farthest from the handle. If you extend a line between them, away from the bear's bag, you'll end up at the North Star, which is very valuable to navigators. You won't see it here. It's beyond the Ursa Major's boundaries. It's in the constellation Ursa Minor, the smaller bear. Yes, Cathy?

Cathy: So how many stars are there in total in Ursa Major?

Professor: Well, how many stars in the galaxy?

Cathy: I' d say billions.

Professor: Okay we' ve identified fifty or so galaxy within the Ursa Major boundary. You can do the math. An asterism is a traditional star pattern that is not classified as a constellation by the IAU, who coined the term asterism. Well, I personally believe the Big Dipper deserves more respect. I mean, there' s evidence that this grouping is recognized by Paleolithic hunters over 1300 years ago and is recognized by people around the world. If only I' d been a member of the IAU in the 1920s. That' s it. The Big Dipper is a good example of an asterism. It is part of a distinguished group of stars, but it is part of a constellation, a constellation called Ursa Major. The name Ursa Major comes from the Latin and means the larger bear. Let' s take a look at the Ursa Major.

答案

1. A 2. C 3. C 4. CD 5. B 6. BD

文章大意

第一段： 教授开篇提到普通人跟天文学家关于星系的概念不一样。他问 Cathy，啥是星座？Cathy 回答，就是一组星星，连起来看像某个图案。就是说这是普通人的说法。星座的名字来自古老的神话传说。Cathy 举例 Orion【猎户星座；俄里翁（希腊神话人物）】。教授说这个名字值的说希腊神话里的一个猎人。每年 11 月至来年 2 月的时候，猎户座能在夜空中清晰可见。这给少数几个学者提供了一个很好的例子，说明大众对于星座的解读跟当代天文学家的理解如何不同。

第二段：教授说，千年来，全世界的人们都注意到这些星星组成的图案，并为此编了故事、给了图案名字。随后，当天文学发展成为一门科学，尤其是当望远镜

的加入，天文学家发现了很多新的星星，当他们给它们命名用以指明它们的位置时，这依据的是最近的星座。所以，对于天文学家来说，这些新发现的星星就成了那个星座的一部分。

第三段：但是很多新发现的星星是介于两个星座之间的，那又该怎么命名呢？于是乎，在上世纪 20 年代，国际天文联合会（International Astronomical Union，简称 IAU），提出一个 88 星座的列表。IAU 先是不得不把传统星座跟较新确定的星座相结合，随后就清晰界定了每个星座的区域：跟平常描述地点的坐标轴类似的横轴、纵轴。这些界限把地球上能看到的整个星空划分为 88 个连续区域，在这些区域下，天文学家用星座来描述。有些星座很大，有些很小，而且不是每个星座都跟传统意义上的星座完全对等。

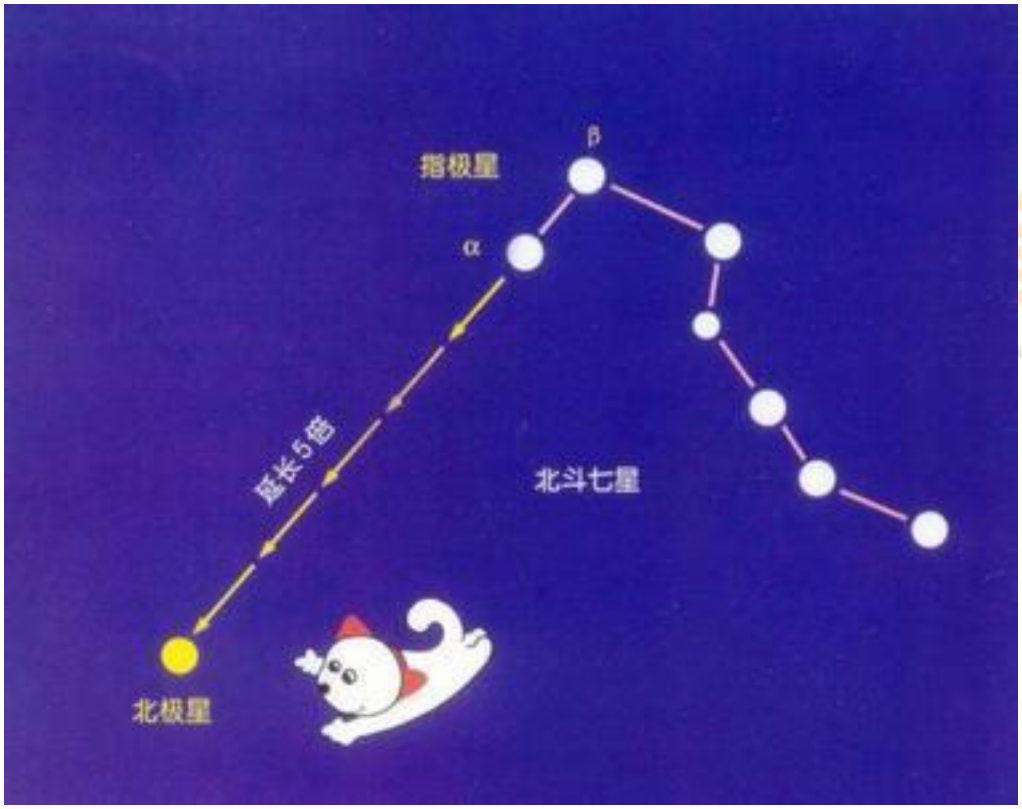
第四段：教授举例北斗七星（The Big Dipper，也叫 Plough，或 Wagon），大多数人不晓得的是天文学家不把它称为一个星座，而把它叫做“星群”（asterism）。星座能清晰地看到其界限，而北斗七星却是由线构成其手柄跟勺子。北斗七星是大熊星座（Ursa Major）最亮的星星。

第五段：教授说看看勺子里的两颗星星。如果把它们之间的连线往延长，就能找到北极星（North Star）。北极星对导航的人很重要，它不在大熊星座里，在小熊星座（Ursa Minor）里。

第六段：Cathy 提问，大熊星座里有多少星星？教授反问一个星系里有多少星星呢？Cathy 说得有 10 亿颗吧。教授说我们在大熊星座内部发现了 50～60 个星系，多少个星星就自己算算看。

第七段：教授回到星群概念上来，他说星群有 IAU 定义的，不属于星座。教授自己认为北斗七星应该有更高规格的待遇，因为 1300 年前的旧石器时代的人就认识它了，今天全球这么多人对其也是很熟悉。教授还说要是自己在当时 IAU 里就好了。

第八段：教授说北斗七星是星群的很好的一个例子。它是一组明显星星的一部分，但也是大熊星座的一部分。大熊这个名字来自拉丁语。接下来要讲大熊星座了。



L24

题目

1. What is the main purpose of the lecture?
A. To describe research methods used to determine when ice ages occurred
B. To discuss and explain the regular occurrence of ice ages
C. To examine a controversy over the length of the last ice age
D. To explain why glaciers tend to concentrate in Earth's polar regions

2. Why does the woman mention global warming?
A. To point out a process that can't be accounted for by the Milankovitch theory
B. To suggest that greenhouse gases were present in Earth's atmosphere during the last ice age
C. To challenge the idea that ice ages will continue to come and go in the future
D. To express her opinion that society should work harder to stop global warming

3. The professor discusses research done on ancient coral reefs. How was the research conducted?
A. The reefs were studied to determine the kinds of animals that lived there.
B. Different layers of ancient coral were analyzed to determine their age.
C. The reefs were examined for patterns of wind erosion.
D. The composition of ancient reefs was compared to that of living reefs.

4. The professor describes an important discovery about Earth's tilt. What was the discovery?
A. The angle of the tilt changes slightly over long periods of time.
B. The tilt has a less severe effect on climate than previously thought.
C. The tilt is influenced by the presence of ice on Earth's poles.
D. The Earth appears to wobble less severely now than it did in the past.

5. In addition to Earth's tilt, what other aspect of Earth's orbit did Milankovitch consider when forming his theory?
A. Why Earth's orbit was circular in the past
B. How many times Earth orbits the Sun during an ice age
C. The similarity of Earth's orbit to the orbits of other planets
D. Earth's distance from the Sun at various points in its orbit

6. What is the professor's opinion of the Milankovitch theory
A. It is quite convincing but needs to take into account some additional factors.
B. It is outdated and needs to be reexamined.
C. It accurately predicts the onset of ice ages but not the retreat of ice ages.
D. It is no more credible than other theories about the causes of ice ages.

听力文本

Narrator: *Listen to part of a lecture in a climatology class.*

Professor: Over the past few million years, there have been several ice ages, cold periods when glaciers covered much of the planet. These ice ages have been separated by long intervals of relatively mild climates which we call interglacial periods. In interglacial periods, the glaciers recede to the most Polar Regions. The most recent ice age ended around ten thousand years ago and we' re in an interglacial period right now. But it will probably end one day and there will be another ice age.

Student: But there' s global warming and the ice caps are melting, probably because we' re burning fossil fuels and emitting greenhouse gases. How can we be so sure we' re living in between two ice ages?

Professor: Good question. To answer though, we must consider evidence that ice ages have occurred with striking regularity. Ice sheets have advanced and retreated about every one hundred thousand years over the past few million years. We know this from geological research and particularly by examining ancient coral reefs. See, ocean gets shallower during ice ages because so much water gets locked up in the ice sheets. As a result, coral reefs that normally grow in shallow waters in an interglacial period would end up high on dry land during an ice age and stop growing and then start growing a new layer when the glaciers receded and the water levels came back up. When we dated, determined how old the different coral layers are, we found the periods of coral growth appeared in regular cycles, suggesting that ice ages occurred in regular cycles.

Student: So why do ice ages come and go?

Professor: There are several theories about that like plate tectonics,

the movement of continental plates that created mountain ranges far above sea level. This would have affected ocean currents and wind patterns in ways that could trigger ice ages.

Student: But doesn't that theory predict that ice ages happen randomly? Because if they are random, there's no reason to believe that another ice age will happen, especially with global warming, right?

Professor: It may explain global climate change to some degree. Climate is very sensitive to a variety of variables, but yeah, we need a theory to explain the regular intervals of ice ages and there's a theory that seems to do this. It's called the astronomical theory of climate change, or the Milankovitch theory. Milutin Milankovitch was an astrophysicist who developed a mathematical theory showing that regular ice age cycles are caused by irregularities, small fluctuations, in Earth's movement through space. In the 1920s, Milankovitch calculated these fluctuations and theorized that changes in the Earth's location and orbit were responsible for the ebb and flow of ice ages. For instance, he looked at changes at the angle of the Earth's tilt on its axis. Milankovitch determined that the angle of the tilt is not stable, that the Earth wobbles on its axis. The tilt changes by about three degrees on a cycle of about forty-one thousand years and this slight fluctuation in the tilt has an impact. More tilt causes summers to be warmer and winters to be colder. Less tilt results in the opposite. Cooler summers and milder winters.

Another thing Milankovitch considered was the Earth's orbit around the Sun is not a perfect circle, but an ellipse. The Earth is slightly closer to the Sun during certain times of the year versus other times of the year. Today, the closest approach of the Earth to the Sun is January, making winters in the Northern Hemisphere milder. But

eleven thousand years ago, the closest approach to the Sun occurred in July, making winters colder and the summers hotter.

Well, according to Milankovitch, because they affect summer and winter temperatures, the tilt cycle and this uneven orbital cycle, combine to control the flow and retreat of ice sheets. In the Northern Hemisphere, where most of Earth's land mass is, hundreds or thousands of consecutive cool summers would allow snow and ice to persist to the next winter. As a result, ice sheets would grow and grow. Conversely, a period of warmer summers would shrink ice sheets by melting more ice than accumulates during the winter. It's a compelling theory, but there's still other things that might affect climate like cloud cover and variations in solar energy. So, while the Milankovitch theory is widely accepted, we shouldn't assume it's comprehensive.

答案

1. B 2. C 3. B 4. A 5. D 6. A

文章大意

第一段： 教授开篇提到过去几百万年，经历了几次冰河时期。冰河期之间的时间，我们称之为间冰期。间冰期里，冰川退回到极地附近，离我们最近的一次冰河时期差不多在 1 万年前，我们现在就处在间冰期。可能将来某个时候就会再次出现一个冰河时期。

第二段：学生提问，现在不都再说气候变暖、冰川融化什么的吗？我们怎么知道目前处在两个冰河时期之间？教授说要回答这个问题，必须先考虑到冰河世纪的出现是极具规律性：过去几百万年里，冰河期差不多每几十万年就扩张—收缩一次。我们能知道这些，是通过检测古珊瑚礁。在冰河期，海洋会变得比较浅，因

为大部分水被冻起来了。其结果是，本来间冰期长在浅水里的珊瑚礁，在冰河期出现在了高高的干地上，并且停止了生长。当冰川后撤的时候，珊瑚礁又会开始重新生长，并长成新的一层。当我们把古珊瑚礁进行年代测定的时候，发现珊瑚的生长出现周期性的特点。，这表明冰河期是规律出现的。

第三段：学生提问，冰河期是怎么产生跟结束的呢？教授说有好几个理论，其中又一个是构造板块理论。板块移动形成高山，从而影响洋流、风带，最终导致冰河期。学生继续问，这不是有点随机吗？怎么能说明是及其规律的呢？现在不是全球变暖吗？怎么能说必定会发生另一个冰河期？

第四段：教授说这个可以用全球气候变化来解释。气候对很多变量的变化很敏感。有一个叫 Milankovitch Theory （也叫气候变化的天文理论），由 Milutin Milankovitch 提出。Milutin Milankovitch 本身是一名天文物理家，他发展出一个数学理论，展示了冰河期怎么由地球的运动而引发的。上世纪 20 年代，Milankovitch 计算出了地球运动而引发的小变化，并推断，冰河期的起起落落是由地球的位置跟轨道而引起的。比如他研究了地球倾斜角度的变化，Milankovitch 测定出，地球的倾角不是固定的，会有点晃动。这个晃动的角度变幅在 3 度左右，呈现周期性，周期 4.1 万年。这些小的变动，影响不小。倾斜的较多，导致夏天更热，冬天更冷，倾斜的较少则意味着，夏天较凉快，冬天较暖。

第五段：教授说 Milankovitch 还考虑了地球的轨道，绕太阳转动的时候，地球的轨道并不是一个完美的圆，而是一个椭圆。在一年中的某些时候比其余时候更接近太阳。现在来说，地球最接近太阳的时候是 1 月，这就使得北半球的冬天较暖和。但在 1.1 万年前，最接近太阳的是 7 月份，使得冬天更冷、夏天更热。

第六段：根据 Milankovitch 假说，倾角周期跟椭圆轨道，一起控制了冰川的涨与落。在绝大部分陆地都在的北半球，几百个、几千个的冷夏使得雪能够持续到下一个冬天。其结果就是冰会越变越多。反过来，一连串的炎夏会使得冰川不断收缩。

第七段：教授总结，这个理论很有说服力。但还有很多其它因素可能会影响到气候，比如云层的覆盖、太阳能量的变化等。所以千万不要以为这个假说面面俱到。

L25

题目

1. What is the professor's main point about Daniel Defoe?
A. He was the most famous journalist and novelist of his time.
B. His innovations contributed to the development of the novel.
C. His characters are among the most interesting in English literature.
D. His book, Robinson Crusoe, was based on Defoe's experiences at sea.

2. Why does the professor mention the money Defoe made by selling his writing?
A. To compare Defoe's popularity with that of other writers of the period
B. To help explain why sensationalism was a characteristic of Defoe's writing
C. To point out changes in book publishing that were taking place in the 1700s
D. To emphasize that journalism was very profitable in the 1700s

3. Why did Defoe's name not appear on the first copies of Robinson Crusoe?
A. Defoe considered novels a second-rate form of literature.
B. The public had become critical of Defoe's exaggerated style.
C. The convention of including the author's name on a novel had not yet been established.
D. Defoe wanted it to appear as if the novel had been written by its main character.

4. What points does the professor make about Defoe's narrative style?
Click on 2 answers.
A. It allowed readers insight into the thoughts of Defoe's characters.
B. It resulted in all Defoe's characters having similar personalities.
C. It changed as Defoe gained respectability as a writer.
D. It was influenced by Defoe's previous career as a journalist.

5. What does the professor imply about writers in the late 1700s?
A. They did not try to disguise their attempts to copy Defoe's style.
B. They rejected the use of first-person narrative and wrote in the third person.
C. Their writing style was a reaction to Defoe's informality.
D. Their work combined realism and sensationalism.

6. Why does the professor say this:
A. To invite students to define the word novel
B. To give a reason for his belief that it is not possible to determine the first novel in English
C. To signal that he is about to define the word novel
D. To explain why some critics do not classify Robinson Crusoe as a novel

听力文本

Narrator: *Listen to part of a lecture in an English literature class.*

Professor: Now, last class we were talking about the beginnings of a novel as a distinct genre. Today, we're going to look at a book that some scholars have argued is the first English novel, but in my mind, one can't really say this or that book was the first novel written in English. So much depends on how you define the word novel, right? And the popularity of the book we're going to discuss today, *Robinson Crusoe* by Daniel Defoe, certainly doesn't depend on that criterion. *Robinson Crusoe* was published in 1719 when Defoe was nearly 60-years-old. It tells the story of a man who against the wishes of his parents chooses a life at sea. He experiences a series of shipwrecks and other disasters and eventually winds up spending many years alone on an island.

Now, when this book was written, the form of the novel was still taking shape. And Daniel Defoe was in many ways responsible for the shape the novel eventually did take. Defoe was first and foremost a journalist. He was not a part of upper class society who depended on selling his writing in order to make a living. He knew that the more books or pamphlets he could sale, whether it was a political essay or a travelogue, the more money he would be able to earn. So many of the topics he wrote about were somewhat sensationalized. In other words, he was drawn to stories that were interesting, more adventurous, more appealing to his readers and thus more sellable. Now, even though the public loved wild tales, at the same time they disapproved of stories they considered invented. Defoe had to give them something that seemed true. And the novel *Robinson Crusoe*, it was printed without using Defoe's name so it appeared as if it was written by the character, Robinson Crusoe.

Looking back on this, it makes me mad. Novels are works

of fiction. The characters aren't real. They don't exist. But remember this is the beginning of the novel. People's expectations were very different in the 1700s. Along with embellishing his stories, he also centered them around ordinary people. He had a sympathetic connection to his subjects and often wrote about working man and women, wanderers, and adventurers. This is significant at that time because well, these traits of society hadn't been literary protagonist before.

But most scholars, whether or not they considered Defoe the author of the first English novel, will agree that Defoe's most significant contribution to the novel was his use of first person narrative. Previously, characters had been described almost exclusively to the third person narrative. That is the omnipresent narrator described the actions, the thoughts, the interactions between characters as a sort of all-seeing eye. So, Defoe then changed all that because he was so used to writing in his own voice through his earlier works as a journalist. He shifted that narrative voice over to his protagonist so that his main character was in fact, telling the story. Because of this, you get a real ingenious feel to the characters and we can experience the inner life of his most famous character Robinson Crusoe.

Through Defoe's use of first person, we understand that Robinson Crusoe is highly enterprising. He knows his very success and his very survival depends on his determination. What more than that, we experience Crusoe's thought processes through the prose itself where inside his viewpoint belongs a journey and his struggle to survive. It's a powerful new technical innovation and it changed the course of the novel. So, this technique along with the dramatic subject matter helped make *Robinson Crusoe* one of the most successful books of the eighteenth century.

In fact, it might have been too popular, according to Defoe's critics who were numerous. See, Defoe's style, the sensationalism, caused many of his peers and his successors to view his work as, well, as lacking in respectability. He made the novel so accessible to the general public, that, well, compared to other types of literature, the novel came to be seen as sort of second rate. The fact is the later novelists put a lot of effort into reintroducing formality in the novel. Later in this course, we'll look at some novels in the late 1700s that may seem dull and stupid and in part at least, that's in response, an excessive response, to Defoe's style.

答案

1. B 2. B 3. D 4. AD 5. C 6. B

文章大意

第一段： 教授开篇提到上节课讲到小说开始作为一个全新类型的时期。本节课要讲的是一本小说，某些学者称其为第一本英文小说。但是教授认为没法确定一本书到底是不是第一本英文小说。得先定义一下啥是小说不是？今天要讲的是 Daniel Defoe 写的《Robinson Crusoe》，这本书的受欢迎程度，就不管是哪种定义，都是很明确的。《Robinson Crusoe》发表于 1719 年，Defoe 时年 60 岁。故事讲述的是一个男子违背了父母的意愿，选择了浪迹大海的故事。浪迹途中，他遇到一系列失事，最终在一个岛上独自生活了很多年。

第二段：教授说当这部书写著的时候，小说还仍然在萌芽阶段。小说能有最终的形态，很大一部分原因就是因为 Daniel Defoe 的功劳。他本人不属于上流社会，起初做记者，要靠文字为生。他知道，自己卖的书籍、小册子越多，就越挣钱，哪怕那些是关于政治的，抑或是旅行日志。所以，他写出的很多话题比较“轰动”，

换句话说，他喜欢的是能吸引读者的那些有趣、更冒险的故事。

第三段：教授说，时人虽然喜欢奇闻趣事，但是他们很排斥“造”出来的故事。所以 Defoe 没在书上印自己的名字，就好像书书里面的人物 Robinson Crusoe 写的真实故事一样。教授说，在回过去看看这些就觉得很生气，小说是想象的产物，人物是虚构的。但是又提醒学生们记住当时是小说的初期，18 世纪人们的期望值不同。除了给故事润色，Defoe 还让故事围绕着普通人展开。他对人物有一种同情心，经常写工作对男女、游手好闲之徒还有冒险家。这一点当时很了不得，因为这些人物还没成为过主人公。

第四段：教授说，但是绝大多数的学者，不管他们承不承认 Defoe 是英国第一篇小说的作者，都赞同其对小说最大的贡献是第一人称叙述的使用。在此之前，人物的描述基本上都是第三人称，讲述的人是无处不在—角色内心等，能知道所有发生的一切，似乎是全知全能般存在。Defoe 改变了这一切，因为在早前的记者生涯中，他早已习惯了用自己的声音写作。他把那叙述性的声音转到了其主人公身上，就好像是主人公在讲述这个故事。因此，我们就能感受 Robinson Crusoe 的人物内心。

第五段：教授说，通过第一人称，我们能感受到 Robinson 很有魄力，他知道自己的成功之处，而且他能存活下来，取决于他的果敢。此外，我们还能通过他的胡思乱想来体会到他思考的过程。这种写作技巧很有力，改变了小说的发展轨迹。正是这种技巧，加上戏剧化的人物，才让《Robinson Crusoe》成为 18 世纪最受欢迎的书。

第六段：教授说，当时他的成功招来很多评论家，说这本书可能有点太火了。Defoe 追求“轰动”，以至于其很多同僚跟后继者认为他的作品“缺乏尊重”。他把小说变得如此贴合大众，所以小说跟其它文学形式比起来，小说被划到二等范畴。事实上，后来的很多小说家费了大力气把正式感引进小说。教授说课程后面会讲到 18 世纪末期的一些小说，这些小说看起来有点无聊、愚蠢，作为对 Defoe 风格的回应，只不过回应过度了。

L26

题目

l. What is the main purpose of the lecture
A. To advise students on changing some of their habits
B. To explore the factors that influence habitual behaviors
C. To discuss new research on changes in behavior
D. To explain the importance of habits in everyday life

2. What examples does the professor use to explain context cues
Click on 2 answers.
A. Waking up at the same time every morning
B. Eating breakfast at the same location every day
C. Putting a napkin on one's lap after sitting down to eat
D. Thinking about a presentation while riding a bike to school

3. According to the professor, what is a benefit of habitual behaviors
A. Habitual behaviors encourage people to think about their own actions
B. Habitual behaviors can counteract context cues.
C. Habitual behaviors can help people to quickly learn new behaviors.
D. Habitual behaviors allow people to use mental resources for other tasks.

4. In the study of college students' exercise habits, what did all the students have in common
A. They all wanted to change their habits.
B. They all had weak exercise habits.
C. They all preferred the same kind of physical exercise.
D. They all transferred from one university to another.

5. What can be concluded from the study of college students
A. A habit change can occur only with a conscious change in intentions.
B. Not all habits are automated responses.
C. The loss of a context cue can be sufficient to cause a habit change.
D. Some people can change neither context cues nor their intention.

6. What does the professor imply when she says this:
A. She thinks that the answer to her question is obvious.
B. She is going to change a class assignment.
C. She realizes that she might be contradicting a point she made earlier.
D. She does not expect the students to take her comment seriously.

听力文本

Narrator: *Listen to part of a lecture in a psychology class.*

Professor: Every morning when I wake up, I wash my face, brush my teeth and get dressed. Those are habits. I do them pretty much every morning without exception, pretty much in that same order.

Now habits are an important part of our lives. Stop for a second, and think how complicated our lives would be if, well, if we didn't have habits. If everyone had to consciously think about every single step for everything that we do every day. Even things that we do as part of our routines.

Okay, so what exactly is a habit? In behavioral psychology, habits or habitual behaviors, are defined as automated responses triggered by context cues. Let me repeat that. Habits are automated responses triggered by context cues.

So what does that mean? An automated response is something that you do without thinking about it. Context cues are the condition or situation that causes the response. For example, every morning on my way to work, I stop and eat breakfast at a certain coffee shop. I don't think about it, I, I just do it. When I approach the corner where the coffee shop is, I automatically slow down, and stop my car, park, and go into the coffee shop. So the automated response is my stopping at the coffee shop. And the context cue in, well in this case the situation that causes the response, is the location. Or more precisely, my being at the location.

A context cue doesn't have to be an external situation. It can also be an action I do that comes immediately before another action of mine. Well, like when I sit down at the dinner table. The first thing I do after I sit down is put my

napkin on my lap. I do one thing and then that action is followed by another specific action. Sitting down is the context cue, putting my napkin on my lap is the automated response.

Someone once said, "Habitual behaviors make everyday life easier" because the automated responses free up our mental resources for other things. For example, when you're driving or riding your bike to school, you're using automated responses learned through repetition. That's why you're able at the same time, to think about the presentation in your history class later that day.

But there's a downside to this automatic behavior. Because habits are automatic, they're hard to change. You can't just decide to get rid of that habit and it's gone. There's a big difference between intentions and behaviors, between changing your mind about doing something and actually changing what you do. Especially when it's a habit. Habits keep us doing what we've always done, even if it is our intentions to act otherwise.

So a really good way to change a habit, is to change the context in which the habit occurs. In other words, get rid of the context cues. Uh, let's go back to my habit of always stopping at this coffee shop. Let's say one day I decide I'd like to save money by not eating breakfast there. I changed my intentions, but as I've said, that alone may not be enough. So what I can do is change the context. And a good way for me to change the context would be to take a different route to work, right?

Context is incredibly powerful. In fact, just changing the context itself can cause a change in the automated response. Researchers studying in the mechanisms of habits looked at the exercise habits of college students who transferred to a new university. The question was, did students who had a habit of doing physical daily exercise

maintain this habit when they changed schools?

At first you might wonder why that would matter. What does being at a new university have to do with exercising? Well, you'd be surprised. What the study found was that some of the student's who'd exercised regularly at their old university, stopped doing so when they transferred. Apparently the habit was no longer queued automatically in the new environment. So changing the context, caused these students to lose the habit. Even if exercise was a strong habit before.

And the researchers found that the students who maintained the habit, were the ones who had the conscious intention to keep exercising in the new environment. For those students, their intentions to continue their habits, counteracted the change in context. So as you can see, intentions can be a powerful force. And if you want to change a habit, both change in context and strong intentions are important.

答案

1. B 2. BC 3. D 4. D 5. C 6. A

文章大意

第一段：教授开篇介绍了自己早上起床后的洗脸刷牙穿衣等动作，引出习惯性动作这个概念。教授还举反例，说如果没有习惯，可能一天中每件事都要思考怎么做，生活会很复杂。

第二段：习惯的定义是“由情景提示触发的自动反应”。教授举例自己每天上班路上，都会在某个咖啡店吃早饭。自己啥都没想，就是这么做了。当自己开车到了拐角处，会自动减速、停车、进咖啡馆。这个例子里，“情景提示”就是自己出现在某个地点。

第三段：有时“提示”不一定是外部的，也可以是一个自己的某个动作。教授举例自己在餐桌前坐下后，会立即在膝盖上放上餐巾。这里“坐下”是“提示”，“放餐巾”就是“自动反应”。

第四段：教授提到“自动反应”也有缺点：很难改变。教授提到在“改变想法”跟“改变行为”之间有区别。“习惯”在我们改变想法后，还是在左右我们的行为。所以想改变习惯的一个好方法，是改变“情景提示”。教授再一次提到前面吃早饭的咖啡馆，如果想省钱，不去那里吃，仅仅改变意图不够，还要换个上班路线。

第五段：教授提到“情景提示”很强大。仅仅改变“提示”也可以导致“自动反应”的改变。一个研究员转到新学校的学生的锻炼习惯。结果发现原来有每天锻炼习惯的，转校后就不锻炼了，因为新环境下没了原来的“情景提示”。

第六段：而也有同学坚持了下来，因为他们自身想保持锻炼这个习惯的想法，抵消了“提示”的变化。教授总结，意志力也很有威力。如果想改变一个习惯，“提示”的改变跟强意志力都很重要。

L27

题目

1. What does the professor mainly discuss?
A. Different ways to apply a particular teaching technique
B. Research showing that most students have learning-style preferences
C. An analysis of research into a particular approach to teaching
D. Feedback from teachers who adapted their teaching styles to the learning styles of individual students

2. What did the psychologists conclude after reviewing research on the meshing hypothesis?
A. The hypothesis is not adequately supported by valid research data.
B. Teachers should adapt their lessons to students' individual learning styles.
C. Students generally learn best through hands-on activities.
D. Individual learning styles differ much more than previously believed.

3. According to the professor, how might school spending be affected by the psychologists' findings?
A. Schools could focus on spending that addresses the diverse needs of individual students.
B. Schools could reduce costs by eliminating purchases of unnecessary materials.
C. Schools could find new sources of income so that they can afford to introduce more advanced teaching methods.
D. Schools could ignore the psychologists' recommendations in order to save money.

4. What does the professor's example of a science class illustrate?
A. A teaching approach in which students could choose among several types of learning activities
B. A reason that teachers need to know the learning styles of individual students
C. A situation in which the teaching method was matched to the lesson's content
D. An opportunity for students to discuss their learning-style preferences with one another

5. What is the professor's attitude toward new trends in education
A. They have been responsible for major educational improvements in recent years.
B. They can be ignored, since they rarely lead to improved teaching methods.
C. Teachers should be aware of them but not adopt them without proof that they are effective.
D. Teachers should put them into practice without further delay.

6. What does the professor mention as a weakness of the article published by the psychologists?

A. Its conclusions are contradicted by newly published research.
B. Its conclusions are limited to lessons taught in science classes.
C. The psychologists did not follow the scientific method carefully enough.
D. The psychologists failed to consider teachers' accounts of classroom experiences.

听力文本

Narrator: *Listen to part of a lecture in an educational psychology class.*

Professor: Some of you may have heard about learning styles, the idea that there are different ways to teach or learn a material, new information, and these are not equally effective for every learner. Different learners prefer different ways of learning. For examples, a visual learner might want to see the vocabulary words written down or be shown a picture or a chart. An auditory learner would want to hear the new word being used. A kinesthetic, or physical learner, would prefer to physically interact with the material in some way like maybe moving around a set of cards with new vocabulary words written on them. And from this idea of learning style, something called the meshing hypothesis has developed.

The idea behind the meshing hypothesis is that learning takes place most effectively when it' s matched to the individual student' s preferred learning style and so if this is the case, it would make sense to match how teach our students to how each one prefers to learn, right? The meshing hypothesis has influenced a lot of schools in the United States which have spent a lot of money to determine how individual students prefer to learn and also to purchase materials for teaching these students by targeting their individual learning style.

But is there any evidence to support the hypothesis? Well, teachers do tell lots of anecdotes, stories, about how their students learn best. But as for solid evidence from scientific studies, well, a recent journal article

concludes it doesn't amount to much. The article was written by four psychologists who looked at the experimental research that has been done on the meshing hypothesis. They wanted to see how well students did when the learning style of each student was identified, and then all the students were randomly divided into classes where the teaching is based on one particular learning style or another. The only really valid proof for the meshing hypothesis, they argued, would be to give the same test to all the students at the end of the course and see whether students of the class that matched the learning style generally outperformed the students in the class that didn't match the learning style. As it turned out, sometimes performance matched up with the student's learning style and sometimes it didn't. So based on these results, the psychologists argued that there's no point in trying to adapt teaching styles to match the learning style of each student which by the way, has big implications for the push to purchase expensive educational products that target individual learning style.

Instead, and this is the key I think, the common thread in the research was that all students tend to do better when the instructional technique was tailored to match the material they were learning. What I mean is, let's say you're a science teacher and you're going to teach your students about molecular structure. You could give your student something to read, or you could design an activity where your students actually build models of molecules. If you accept the meshing hypothesis, you might try to present separate lessons to fit the distinct learning style of different students, but research shows that most students, even those who consider themselves visual or auditory learners, will do best with this particular subject matter if they build models. Interesting, huh? And I'd say, a warning for us to be a bit more critical before we blindly adopt the latest trend. On the other hand, the psychologists booked experiments but

not teachers' anecdotes and observations.

Teachers can directly observe the results that their instructions have on students and some have some have said that they do see a difference in students' learning when they the teachers match how they teach to how the students learn. So, I have to wonder, if there's not potentially valuable information here. Information that didn't get the consideration it deserves. In any case, it all comes back to the question of what role the meshing hypothesis should play in how we teach our students. Even some experts who totally believe in learning styles agree it's not a good idea to try to tailor teaching to each student. On the other hand, some research has shown that when instruction about learning style is part of the training they receive, teachers do tend to value their approach and their students do benefit.

答案

1. C 2. A 3. B 4. C 5. C 6. B

文章大意

第一段：教授开篇提到有好几种学习类型，而且对每个学习者来说，不同的学习类型效果也不一样。比如视觉型的喜欢看，听觉型的喜欢听，物体类喜欢跟内容互动。由此，因材施教的教学方法（meshing hypothesis）就发展起来。

第二段：这个方法强调的是依据不同学生喜好的不同学习类型而授课。教授说，如果这个说法成立，就应该把“如何教”跟“喜好哪种学习方法”相匹配。这个学说影响了美国众多学校。它们花了很多钱去了解每个学生喜欢怎么学、买相应的上课材料。

第三段：但是有没有证据支持这种假说呢？教授说虽然老师们会说很多小故事，

讲他们的学生如何学的最好。但是，有没有科学研究的实锤呢？教授提到了一个最近的研究表明：区别不大。这个研究由 4 个心理学家写成，他们查看了使用“meshing hypothesis”的试验。他们把学生分两组，一组的学生识别出他们的学习偏好；而另一组则把学生随机分到不同学习类型班级中。研究者说支持“meshing hypothesis”唯一有效的证据，就是试验结束的时候考试结果，前者普遍比后者成绩好一些。教授说，没想到的是，考试表现跟了解学习偏好并不完全趋同。于此，4 名心理学家得出结论：没必要了解学习偏好。而且，这种学习偏好，得花大价钱采购不同学习内容。

第四段：教授说不应该对学生“因材施教”，而应该对“上课内容”因材施教，并举例科学课上讲分子结构，老师既可以让学生阅读相关资料，也可以让学生做出分子模型。但是如果使用“meshing hypothesis”，老师可能需要为不同类型的学生准备不同的课程。但是研究表明，绝大多数的同学，即使是视觉型跟听觉型的同学，对“自己动手做模型”这个“因教材施教”的方法响应最佳。教授总结，所以这就告诉我们在追随最新潮流之前，要多批判性思考。

第五段：那 4 名心理学家依靠的是试验，而不是老师的小故事跟观察。教授说老师们据称，对学生的学习类型“因材施教”后，确实能观察到明显的区别。所以这里是否存在信息没有足够考量的问题。归结到最后就是要看“meshing hypothesis”应该起到怎样的作用。即便是信这一套的专家，也同意对每个学生的学习偏好“因材施教”不是一个好主意。然而也有研究表明，培训时如果涉及到学习类型的内容，老师们确实会更注重自己的教学方法，学生们也确实获益。

我们坚持前行，只因每一个留学梦想都值得认真对待，我们不懈努力，只因每一次在线托付都无比珍贵。小站集左手名师，右手黑科技为一体的一站式智能学习系统为你全新升级而来。筑梦成长，留学就选小站。