Exercise 31

1、High Towers, a company that occupies several office buildings, is considering installing new energy-efficient lightbulbs in its buildings. The new bulbs require less than half the electricity consumed by the conventional bulbs currently used to produce the same amount of light. The new bulbs also last considerably longer. It follows that by replacing old bulbs as they bum out with the new kind of bulb, High Towers would significantly reduce its overall lighting costs.

Which of the following, if true, most strengthens the argument given?
(A) If the new bulbs are widely adopted, as seems likely, they will be produced in large enough quantities to be offered at prices comparable to those of conventional bulbs.
(B) The utility that supplies High Towers with electricity offers discount rates to its largest customers.
(C) High Towers has recently signed a contract to occupy an additional small office building.
(D) High Towers has begun a campaign to encourage its employees to turn off lights whenever they leave a room.
(E) The company that manufactures the new bulbs has been granted a patent on the innovative technology used in the bulbs and thus has exclusive rights to manufacture them.

阅读 1：

Q1：新的灯泡省电，所以推出会节约成本；
但是成本是由电能消耗和灯泡价格等因素共同决定的，A 选项补充支持了原文；

The defoliation of millions of acres of trees by massive infestations of gypsy moth caterpillars is a recurring phenomenon in the northeastern United States. In studying these outbreaks, scientists have discovered that affected trees fight back by releasing toxic chemicals, mainly phenols, into their foliage. These noxious substances limit caterpillars' growth and reduce the number of eggs that female moths lay. Phenols also make the eggs smaller,

which reduces the growth of the following year's caterpillars. Because the number of eggs a female moth produces is directly related to her size, and because her size is determined entirely by her feeding success as a caterpillar, the trees' defensive mechanism has an impact on moth fecundity.

The gypsy moth is also subject to attack by the nucleopolyhedrosis virus, or wilt disease, a particularly important killer of the caterpillars in outbreak years. Caterpillars contract wilt disease when they eat a leaf to which the virus, encased in a protein globule, has become attached. Once ingested by a caterpillar, the protein globule dissolves, releasing thousands of viruses, or virions, that after about two weeks multiply enough to fill the entire body cavity. When the caterpillar dies, the virions are released to the outside, encased in a new protein globule synthesized from the caterpillar's tissues and ready to be picked up by other caterpillars.

Knowing that phenols, including tannins, often act by associating with and altering the activity of proteins, researchers focused on the effects on caterpillars of ingesting the virus and leaves together. They found that on tannin-rich oak leaves, the virus is considerably less effective at killing caterpillars than when it is on aspen leaves, which are lower in phenols. In general, the more concentrated the phenols in tree leaves, the less deadly the virus. Thus, while highly concentrated phenols in tree leaves reduce the caterpillar population by limiting the size of caterpillars and, consequently, the size of the female's egg cluster, these same chemicals also help caterpillars survive by disabling the wilt virus. Forest stands of red oaks, with their tannin-rich foliage, may even provide caterpillars with safe havens from disease. In stands dominated by trees such as aspen, however, incipient gypsy moth outbreaks are quickly suppressed by viral epidemics.

Further research has shown that caterpillars become virtually immune to the wilt virus as the trees on which they feed respond to increasing defoliation. The trees' own defenses raise the threshold of caterpillar vulnerability to the disease, allowing populations to grow denser without becoming more susceptible to infection. For these reasons, the benefits to the caterpillars of ingesting phenols appear to outweigh the costs. Given the presence of the virus, the

trees' defensive tactic apparently has backfired.
(446 words)

2. It can be inferred from the passage that wilt disease virions depend for their survival on
(A) protein synthesized from the tissues of a host caterpillar
(B) aspen leaves with high concentrations of phenols
(C) tannin-rich oak leaves
(D) nutrients that they synthesize from gypsy moth egg clusters
(E) a rising threshold of caterpillar vulnerability to wilt disease

3.Which of the following best describes the function of the third paragraph of the passage?
(A) It resolves a contradiction between the ideas presented in the first and second paragraphs.
(B) It introduces research data to support the theory outlined in the second paragraph.
(C) It draws a conclusion from conflicting evidence presented in the first two paragraphs.
(D) It shows how phenomena described in the first and second paragraphs act in combination.
(E) It elaborates on the thesis introduced in the first paragraph after a digression in the second paragraph.

4. Select the sentence in the passage that the author uses as a supporting idea to explicate how gypsy moth caterpillars become immune to the wilt virus.

For the following question, consider each of the choices separately and select all that apply
5.Which of the following statements about gypsy moth caterpillars is supported by information presented in the passage EXCEPT?
A Differing concentrations of phenols in leaves have differing effects on the ability of the wilt virus to kill gypsy moth caterpillars.
B Female gypsy moth caterpillars stop growing after they ingest leaves containing phenols.
C The longer a gypsy moth population is exposed to wilt disease, the greater the likelihood that the gypsy moth caterpillars will become immune to the virus.

译文：

在美国东北部地区，成千上万英亩的森林由于受舞毒蛾毛虫（以下称 G 虫）的大规模侵扰而落叶，这也是一种经常复发的周期性灾害。在研究这些虫害爆发过程中，科学家们发现感染虫害的树木通过释放一种有毒的化学物质，主要是苯酚（以下称 PH），进入叶子中而发生作用。这些有毒物质会抑制毛虫的生长，并减少雌成虫产卵的数量。PH 还能使卵变小，这会抑制下一代毛虫的成长。由于雌成虫的产卵数量与其大小直接相关，而其大小又完全受毛虫时期发育水平影响。因此树木的防御机制将对虫子的生殖力产生影响。

G 虫也会受到核酸多角体病毒（以下称 N 病毒），或称枯萎病（以下称 W 病）的影响，这是一种在爆发性年分中，对毛虫起主要杀伤作用的物质。毛虫食入含有此病毒的叶子——此病毒被裹在蛋白质小球中——就会染上病状。一旦被毛虫吞入，蛋白质小球会逐渐分解，而放射出成千上万的病毒或病毒体。大约两星期后，就繁殖到能充满此毛虫整个躯体。毛虫死后，病毒会释放到外面，被由毛虫机体分解合成的新蛋白质包裹成小球，等待有机会能被其它毛虫吞食。

研究人员注意到包括鞣酸（以下称 T）在内的 PH 经常会与蛋白质联结而最终改变蛋白质活动，他们集中研究了毛虫同时食入病毒和（含毒药的）树叶后产生的影响。他们发现，在 T 高含量的橡树叶 O 上，病毒消灭毛虫的效果要比 PH 含量低的颤杨树叶 A 消灭毛虫的效果差得多。总的来说，PH 在树叶中含量越高，病毒的杀伤性就越低。因此，尽管高含量的 PH 可通过限制毛虫大小，继而使雌虫卵变小来减少毛虫数量，与此同时，这些化学物质通过使 W 病毒失去效力从而可以帮助毛虫生存。森林中的 O 树，叶中 T 的含量高，甚至为毛虫提供防病的美好天堂。然而，诸如 A 这类树群中，G 虫爆发在初始阶段会马上被病毒流行所抑制。

进一步的研究证明，当毛虫侵犯的树木对此做出反应后（即分泌毒药），毛虫对 W 病毒实际上具有了免疫力。树木自身的防御能力使毛虫受病毒感染的临界值提高，而使毛虫群变得密集而不易受病毒侵扰。因此，食入 PH 似乎给毛虫带来了超过其代价的好处。由于有病毒的存在，树木的防御机能显然已变得适得其反。

重点词汇：

defoliation [diːfəulieiʃən] n. 落叶
caterpillar [ˈkætəpilə] n. 毛虫
phenol [ˈfiːnɔl] n. 苯酚
foliage [ˈfəulidʒ] n. 叶子
fecundity [fiːˈkəndəti] n. 生殖力，【植】特指有性生殖力
wilt disease 枯萎病
ingest [inˈdʒest] v. 摄取，吸收，消化
virion [ˈvaiəriən] n. 病毒体
body cavity 体腔
tennin 单宁酸，鞣酸
haven [ˈheivn] n. 庇护所，天堂
incipient [inˈsipiənt] a. 早期的，刚开始的
immune to 对…有免疫力
threshold [ˈθreʃhəuld] n. 临界点，阈值
outweigh [autˈwei] v. 在…方面超过
backfire [ˈbækˈfaiə] v. 向回开火，搬起石头砸自己的脚

重要背景：

舞毒蛾：昆虫纲，鳞翅目，毒蛾科。果树和林木害虫。雌蛾体长约 30 毫米，翅展约 70 毫米，黄白色，前翅近前缘处有褐色弯曲斑纹四条，前后翅外缘有黑纹一列。雄蛾体长约 20 毫米，翅展约 40 毫米，灰褐色，前翅有褐色弯曲斑纹。幼虫黑色，全身有多数刚毛，背面有黄色斑纹，老熟时体长 60 毫米。年生一代，为世界性大害虫。在我国，东北主要危害林木，华北对果树的危害大。

Q 2:

文章指出 W 病毒的生存依靠：
在第二段。
A. 正确。毛虫体内组织合成的蛋白质。L
B. A 树中 PH 的高含量。
C. 富含 T 的橡树叶。
D. 它们从毛虫卵内合成的营养物。
E. 毛虫易受病毒侵扰的临界值。
全不是二段内容。

Q3:

第三段的作用：
看原文，一、二两段两种机制，三段将其合在一起。
∴D 正确。它显示了前两段所谈现象有何关系。
A. 它解决了第一、二段之间存在的矛盾。无。
B. 它引进数据以支持第二段理论。偏。
C. 它为前两段的矛盾证据做结论。前两段证据并不矛盾。
E. 它充分论述第一段提出的，而第二段离题的观点。无。

Q4: 通过 immune 可以定位在最后一段：

The trees' own defenses raise the threshold of caterpillar vulnerability to the disease, allowing populations to grow denser without becoming more susceptible to infection.

Q5: 由 In general, the more concentrated the phenols in tree leaves, the less deadly the virus. 得到 A.

BC 在文章中都没有体现，所以答案 BC.

Although a historical lack of access to formal Spanish-language education initially limited the opportunities of some Chicanos to hone their skills as writers of Spanish, their bilingual culture clearly fostered an exuberant and compelling oral tradition. It has thus generally been by way

of the emphasis on oral literary creativity that these Chicano writers, whose English-language works are sometimes uninspired, developed the powerful and arresting language that characterized their Spanish-language works. This Spanish-English difference is not surprising. When writing in Spanish, these authors stayed close to the spoken traditions of their communities. Works in English, however, often required the elimination of nuance or colloquialism, the adoption of a formal tone, and the adjustment of themes or ideas to satisfy the different demands of national publications. (127 words)

6.According to the author, the Chicano oral experience contributed directly to which of the following characteristics in the work of some Chicano writers?
(A) A sensitivity to and adeptness in using the spoken language
(B) A tendency to appear in national rather than regional publications
(C) A style reflecting the influence of Spanish language education
(D) A reliance on a rather formal style
(E) A capacity to appeal to a broad range of audiences

7. Which of the following best characterizes the function of the indicated portion (the last two sentences) of the passage ?
(A) They expand on an advantage mentioned in the first sentence of the passage.
(B) They outline the consequences of a limitation discussed in the first sentence of the passage.
(C) They provide explicit examples drawn from the oral and the written works mentioned in the second sentence of the passage.
(D) They explain the causes of a phenomenon mentioned in the third sentence of the passage.
(E) They limit the applicability of a generalization made in the third sentence of the passage.

阅读 2：
参考译文：

译文：

尽管在历史上缺乏正式接受西班牙语教育的机会从一开始就限制了一些奇卡诺人钻研作为西班牙语作家所需的语言技巧，但双语文化显然培养了丰富的、动人的口语习俗。通过强调口头文学创造力的方法，这些奇卡诺作家英语著作有时平淡无奇，但却创造了以强有力的、有吸引力的语言为特征的西班牙语著作。他们使用这两种语言的效果差异并不奇怪。当用西班牙语写作时，这些作家贴近其社会的口语习俗，社会上出版物、支持性意见、有启发的评论在当地报纸上反馈得很快。然而英语著作常要求消除表达中的精妙之处或者口语化风格，采用正式的语气，调整主题或思想以满足全国发行出版物的不同需要。

重点词汇：

Chicano 奇卡诺人，在美国居住的拉丁美洲人后裔
hone [həun] v. 磨练，训练
bilingual [bai'liŋgwəl] a. 双语的
exuberant [ig'zju:bərənt] a. 茂盛的，生气勃勃的
colloquialism [kə'ləukwiəlizəm] n. 口语体，口语用法

Q6：

∴A 正确。对口语的敏感性及熟练使用。符合原文。
B. 刊载于全国出版物上而非地方性出版物。反。
C. 反映西班牙语教育的影响的一种文体。反，首句，未受过正式教育，仅会西班牙语口语。
D. 依靠更为正规的文体。反。
E. 大范围吸引海外读者的能力。无。

Q7：

下列哪一项描述了文章末两句的作用：
回看，这两句就是解释上文现象、结论。
∴D 正确。解释了该段第三句提及的现象的原因。
A. 就该段首句提及的有利条件予以扩展。没有继续扩展。
B. 列出在该段第一句讨论的局限性的后果。无局限。
C. 为该段第二句所说情形提供例证。文中无例证。
E. 限制了第三句所做判断的适用性。反。

In medical tomography x-rays map the human body's density variations (and hence internal organs); the information from the x-rays, transmitted through the body along many different paths, is recombined to form three-dimensional images of the body's interior. It is primarily this multiplicative increase in data obtained from the multipath transmission of signals that accounts for

oceanographers' attraction to tomography.
Researchers reasoned that low-frequency sound waves, because they are so well described mathematically and because even small perturbations in emitted sound waves can be detected, could be transmitted through the ocean over many different paths and that the properties of the ocean's interior could be deduced on the basis of how the ocean altered the signals. Their initial trials were highly successful, and ocean acoustic tomography was born.
(128 words)

8.Which of the following, if presented as the first sentence of a succeeding paragraph, would most logically continue the discussion presented in the passage?
(A) Timekeeping in medical tomography must be precise because the changes in travel time caused by density fluctuations are slight.
(B) To understand how ocean acoustic tomography works, it is necessary to know how sound travels in the ocean.
(C) Ships are another possibility. but they would need to stop every 50 kilometers to lower measuring instruments.
(D) These variations amount to only about 2 to 3 percent of the average speed of sound in water, which is about 1,500 meters per second.
(E) The device used in medical tomography emits a specially coded signal, easily distinguishable from background noise

Ironically, now that photography is securely established as a fine art, many photographers find it pretentious or irrelevant to label it as such. Serious photographers variously claim to be finding, recording, impartially observing, witnessing events, exploring themselves—anything but making works of art. In the nineteenth century, photography's association with the real world placed it in an ambivalent relation to art; late in the twentieth century, an ambivalent relation exists because of the Modernist heritage in art. That important photographers are no longer willing to debate whether photography is or is not a fine art, except to proclaim that their own work is not involved with art, shows the extent

to which they simply take for granted the concept of art imposed by the triumph of Modernism: the better the art, the more subversive it is of the traditional aims of art.
(142 words)

9.Which of the following adjectives best describes —the concept of art imposed by the triumph of Modernism as the author represents it in the last sentence?
(A) Objective
(B) Mechanical
(C) Superficial
(D) Dramatic
(E) Paradoxical

10. In the context in which it appears, "ambivalent " most nearly means

○A subversive
○B unambiguous
○C equivocal
○D disreputable
○E contradictory

阅读 1：参考翻译：

在医学上的层面透视法中，X 光绘制人体密度变化(及内部器官)的图像:X 光所感知的信息通过各种方式传播通过人体,重新组合成人体内部的三维图像。海洋学家关注层面透视法的原因,主要是多通道信号传输可使接收的数据成倍增加,这可以用较少的仪器检测大面积的海域。研究者推断低频声波——因为其非常精确,甚至是对声波的极小干扰亦可被检测到——可通过很多不同的通道传输过海洋,于是海洋内部特征、温度、盐度、密度和洋流的速度可在海洋如何改变这些信号的基础上推知。他们最初的实验十分成功,海洋声学层面照相术诞生了。

阅读 2：参考翻译：

具有讽刺意味的是,现在摄影已被无疑地确立为一门纯艺术,但许多摄影家发现,把其称为纯艺术是自命不凡或不合时宜的。严肃的摄影家以各种各样的方式宣称他们是在寻找、记录、不带偏见地观察、记录事件、发现自我,但惟一不宣称自己是在做艺术工作。19 世纪时,摄影与现实世界的联系将其与艺术的关系置于一种模棱两可的状态之中;20 世纪后期,此种状态又由于艺术中现代主义传统而再次产生。重要的摄影家,除了宣布自己的作品非艺术以外,不愿再讨论摄影是否是纯艺术。这一现象显示他们把由现代派的胜利所产生的艺术观念视为理所当然的程度之深:即越是好艺术,越要反对艺术的传统目标。

Q10：

ambivalent 模糊的，正确答案 C，equivocal。