Exercise 12

Traditional research has confronted only Mexican and United States interpretations of Mexican-American culture. Now we must also examine the culture as we Line Mexican Americans have experienced it, passing from 5 a sovereign people to compatriots with newly arriving settlers to, finally, a conquered people—a charter minority on our own land.

When the Spanish first came to Mexico, they inter-married with and absorbed the culture of the indigenous 10 Indians. This policy of colonization through acculturation was continued when Mexico acquired Texas in the early 1800's and brought the indigenous Indians into Mexican life and government. In the 1820's, United States citizens migrated to Texas, attracted by land suitable for cotton. 15 As their numbers became more substantial, their policy of acquiring land by subduing native populations began to dominate. The two ideologies clashed repeatedly, culminating in a military conflict that led to victory for the United States. Thus, suddenly deprived of our parent 20 culture, we had to evolve uniquely Mexican-American modes of thought and action in order to survive.

(168 words)

1. The author's purpose in writing this passage is primarily to

(A) suggest the motives behind Mexican and United States intervention in Texas

(B) document certain early objectives of Mexican-American society

(C) provide a historical perspective for a new analysis of Mexican-American culture

(D) appeal to both Mexican and United States scholars to give greater consideration to economic interpretations of history

(E) bring to light previously overlooked research on Mexican Americans

2. The author most probably uses the phrase —charter minority (lines 6-7) to reinforce the idea that Mexican Americans

(A) are a native rather than an immigrant group in the United States

(B) played an active political role when Texas first became part of the United States
(C) recognized very early in the nineteenth century the need for official confirmation of their rights of citizenship
(D) have been misunderstood by scholars trying to interpret their culture
(E) identify more closely with their Indian heritage than with their Spanish heritage

3. Which of the following statements most clearly contradicts the information in this passage?
(A) In the early 1800's, the Spanish committed more resources to settling California than to developing Texas.
(B) While Texas was under Mexican control, the population of Texas quadrupled, in spite of the fact that Mexico discouraged immigration from the United States.
(C) By the time Mexico acquired Texas, many Indians had already married people of Spanish heritage.
(D) Many Mexicans living in Texas returned to Mexico after Texas was annexed by the United States.
(E) Most Indians living in Texas resisted Spanish acculturation and were either killed or enslaved

先来段翻译吧：
传统研究面对的只是墨西哥人和美国对墨美文化的诠释。现在我们也必须从我们墨西哥裔美国人的角度对所经历过的文化进行一番审视：先是主权民族，接着变成了新来殖民者的同胞，最终沦为被征服了的民族——成了自己的土地上法定少数民族。

当西班牙人率先来到墨西哥时，他们与土著印第安人通婚，并吸收他们的文化。当 1800 年代初墨西哥获得德克萨斯时，这一以同化为手段的殖民化政策被保留了下来，使得土著印第安人得以融入墨西哥人的生活并担任公职。到了 1820 年代，适宜种植棉花的土地将美国人吸引到德克萨斯。随着人数的不断增加，通过征服当地人来获得土地就成为压倒一切的政策。两种意识形态反复碰撞，并在一次导致美国人获胜的军事冲突中达到顶点。于是，我们被突然剥夺了父辈的文化，为了生存，我们不得不逐渐发展出墨西哥裔美国人所独有的思维模式和行为模式。

Q1. 定位至第一段：
"Traditional research has confronted only Mexican and United States interpretations of Mexican-American culture. Now we must also examine the culture"
老观点被新观点重新审视，所以正确选项 C；

Q2. 按照题目定位：读完整句话在讲墨西哥裔美国人的一段血泪史，charter minority on our own land 表达了，虽然他们 minority，但是 on our own land；答案 A;

Q3. 与原文内容冲突的选项，将每个选项取反，看是否在文中有定位:
E： 取反后定位在第二段第一句： When the Spanish first came to Mexico, they intermarried with and absorbed the
culture of the indigenous Indians，选 E；

The determination of the sources of copper ore used in the manufacture of copper and bronze artifacts of Bronze Age civilizations would add greatly to our knowledge of cultural contacts and trade in that era. Researchers have analyzed artifacts and ores for their concentrations of elements, but for a variety of reasons, these studies have generally failed to provide evidence of the sources of the copper used in the objects. Elemental composition can vary within the same copper-ore lode, usually because of varying admixtures of other elements, especially iron, lead, zinc, and arsenic. And high concentrations of cobalt or zinc, noticed in some artifacts, appear in a variety of copper-ore sources. Moreover, the processing of ores introduced poorly controlled changes in the concentrations of minor and trace elements in the resulting metal. Some elements evaporate during smelting and roasting; different temperatures and processes produce different degrees of loss. Finally, flux, which is sometimes added during smelting to remove waste material from the ore, could add quantities of elements to the final product.
An elemental property that is unchanged through these chemical processes is the isotopic composition of each metallic element in the ore. Isotopic composition, the percentages of the different isotopes of an element in a given sample of the element, is therefore particularly suitable as an indicator of the sources of the ore. Of course, for this purpose it is necessary to find an element whose isotopic composition is more or less constant throughout a given ore body, but varies from one copper ore body to another or, at least, from one geographic region to another.
The ideal choice, when isotopic composition is used to investigate the source of copper ore, would seem to be copper itself. It has been shown that small but measurable variations occur naturally in the isotopic composition of copper. However, the variations are large enough only in rare ores; between samples of the common ore minerals of copper, isotopic variations greater than the measurement error have not been found. An alternative choice is lead, which occurs in most copper and bronze artifacts of the Bronze Age in

amounts consistent with the lead being derived from the
40 copper ores and possibly from the fluxes. The isotopic
composition of lead often varies from one source of
common copper ore to another, with variations exceeding
the measurement error; and preliminary studies indicate
virtually uniform isotopic composition of the lead from a
45 single copper-ore source. While some of the lead found in
an artifact may have been introduced from flux or when
other metals were added to the copper ore, lead so added in
Bronze Age processing would usually have the same isotopic
composition as the lead in the copper ore. Lead isotope
50 studies may thus prove useful for interpreting the
archaeological record of the Bronze Age.
(473 words)

4. The author first mentions the addition of flux during smelting in the last sentence in the last paragraph in order to
(A) give a reason for the failure of elemental composition studies to determine ore sources
(B) illustrate differences between various Bronze Age civilizations
(C) show the need for using high smelting temperatures
(D) illustrate the uniformity of lead isotope composition
(E) explain the success of copper isotope composition analysis

For the following question, consider each of the choices separately and select all that apply
5. According to the passage, possible sources of the lead found in a copper or bronze artifact include which of the following?
□A The copper ore used to manufacture the artifact
□B Flux added during processing of the copper ore
□C Other metal added during processing of the copper ore

6. Select the sentence in the passage that the author rejects copper as the —ideal choice ．

7. It can be inferred from the passage that the use of flux in processing copper ore can alter the lead isotope composition of the resulting metal EXCEPT when

(A) there is a smaller concentration of lead in the flux than in the copper ore
(B) the concentration of lead in the flux is equivalent to that of the lead in the ore
(C) some of the lead in the flux evaporates during processing
(D) any lead in the flux has the same isotopic composition as the lead in the ore
(E) other metals are added during processing

仍旧是先上翻译：
对于青铜时代（**Bronze Age**）文明中的铜与青铜制物来说，确定其铸造过程中所应用的铜矿石来源，可大大增加我们对那个时代文化交往和贸易的知识。科研人员已经对这些铜制物和铜矿石进行了分析，以确定各种元素的各种含量，但出于种种原因，这些研究普遍而言没能提供证据，以反映出这些物件中所使用的铜的来源。即使在同一铜矿矿脉中，元素构成也会发生差异，这一般是因为其它元素，尤其是铁、铅、锡、和砷等程度不同的混合。在某些铜制物中注意到的钴或锡的高含量，亦出现在各种铜矿石来源中。此外，对矿石的加工过程也在随之而形成的金属中引入了某些有失控制的次要和微量元素含量的变化。有些元素在溶炼和焙烧过程中蒸发消失，不同的温度和工艺过程产生不同程度的损失。最后，有时在溶炼过程中需添加入助溶剂，以便将废物从铜矿石中除去，而这种助溶剂也会将大量的元素加入到最终产品之中。

在所有这些化学过程中，一个始终不变的元素属性是铜矿石中每一种金属元素的同位素构成。所谓同位素构成，是指在某一元素的特定样品中该元素不同同位素的百分比率。同位素构成因此特别适合于作为铜矿厂来源的示踪物。当然，为了达到此目的，有必要寻找出一种元素，其同位素构成在一个特定的矿体内或多或少稳定不变，但在一个铜矿矿体和另一个铜矿矿体之间，或至少在一个地域和另一个地域之间，应有所不同。

当同位素构成被用来研究铜矿石的来源时，理想的选择似乎是铜本身。研究证明，细微但仍可测量到的差异会自然发生在铜的同位素构成中。然而，这些差异仅在稀有铜矿石中才显得足够的明显；在普通铜矿的矿物质样品之间，超过测量误差的同位素差异还尚未被发现。可供替代的另一种选择是铅，而铅这种金属也存在于青铜时代绝大部分铜和青铜制物之中，其含量与来自铜矿石的铅以及与有可能来自助溶剂的铅保持一致。铅的同位素构成经常在一种普通铜矿石来源与另一种铜矿石来源之间存在差异，其差异程度超出测量误差；而最初的研究表明，对于来自单独一个铜矿石来源的铅来说，其同位素构成几乎是毫无二致的。虽然在某一铜制物中所发现的某些铅很有可能是自助溶剂中引入的，或是当其它金属被添加入铜矿石内时引入的，但是，在青铜时代加工过程中以这种方式加入的铅一般会与铜矿石中的铅具有相同的同位素构成。因此，铅的同位素研究对于解释青铜时代的考古记录来说可能会证明甚为有用。

Q4：该题目有误，改为 in the last sentence in the first paragraph in order to.....
Finally, flux, which is sometimes added during smelting to remove waste material from the ore, could add quantities of elements to the final product.
亦即影响这些矿石的纯度，所以选择 **A**

Q5：I 和 II 定位 An alternative choice is lead, which occurs in most copper and bronze artifacts of the Bronze Age in amounts consistent with the lead being derived from the copper ores and possibly from the fluxes.
III 定位 While some of the lead found in an artifact may have been introduced from flux or when other metals were added to the copper ore, lead so added in Bronze Age processing would usually have the

same isotopic composition as the lead in the copper ore.
正确答案 **ABC;**

Q6：line 34：However, the variations are large enough only in rare ores; between samples of the common ore minerals of copper, isotopic variations greater than the measurement error have not been found

Q7：An alternative choice is lead, which occurs in most copper and bronze artifacts of the Bronze Age in amounts consistent with the lead being derived from the copper ores and possibly from the fluxes.这个似乎不大精确，有更好的定位么，**D** 项绝对化了，所以选择 **D**

Echolocating bats emit sounds in patterns—
characteristic of each species—that contain both
frequency-modulated (FM) and constant-frequency (CF)
Line signals. The broadband FM signals and the narrowband
5 CF signals travel out to a target, reflect from it, and
return to the hunting bat. In this process of transmission
and reflection, the sounds are changed, and the changes
in the echoes enable the bat to perceive features of the
target.
10 The FM signals report information about target
characteristics that modify the timing and the fine
frequency structure, or spectrum, of echoes—for
example, the target‘s size, shape, texture, surface
structure, and direction in space. Because of their narrow
15 bandwidth, CF signals portray only the target‘s presence
and, in the case of some bat species, its motion relative to
the bat‘s. Responding to changes in the CF echo‘s
frequency, bats of some species correct in flight for the
direction and velocity of their moving prey.
(150 words)

8. According to the passage, the information provided
to the bat by CF echoes differs from that provided
by FM echoes in which of the following ways?
(A) Only CF echoes alert the bat to moving targets.
(B) Only CF echoes identify the range of widely
spaced targets.
(C) Only CF echoes report the target‘s presence to
the bat.
(D) In some species, CF echoes enable the bat to
judge whether it is closing in on its target.
(E) In some species, CF echoes enable the bat to
discriminate the size of its target and the

direction in which the target is moving.

9. Which of the following best describes the organization of the passage?
(A) A fact is stated, a process is outlined, and specific details of the process are described.
(B) A fact is stated, and examples suggesting that a distinction needs correction are considered.
(C) A fact is stated, a theory is presented to explain that fact, and additional facts are introduced to validate the theory.
(D) A fact is stated, and two theories are compared in light of their explanations of this fact.
(E) A fact is stated, a process is described, and examples of still another process are illustrated in detail.

By far the most outstanding of American talented women sculptors during the twentieth century is Louise Nevelson, who in the eyes of many critics is the most original female artist alive today. One famous and influential critic, Hilton Kramer, said of her work, —For myself, I think Ms. Nevelson succeeds where the painters often fail.
(55 words)

10. The author quotes Hilton Kramer most probably in order to illustrate which of the following?
(A) The realism of Nevelson‘s work
(B) The unique qualities of Nevelson‘s style
(C) The extent of critical approval of Nevelson‘s work
(D) A distinction between sculpture and painting
(E) A reason for the prominence of women sculptors since the 1950‘s

阅读 1：
Q8. 细节题：CF signals portray only the target’s presence and, in the case of some bat species, its motion relative to the bat’s. 正确选项 D；
AC 选项的错误在于把 only 放错了地方。

Q9. 迷惑性很大的写法题：
A. 正确答案；
B. 没有 example；
C. 没有 additional fact；

D. 没有 two theories；只是一个 theory 的两个分类；
E. 同 B；

阅读 2：
一直在说 LN 的 outstanding 之处，HK 作为一位很有影响力的任务，说的话自然更有分量，当然是进一步烘托 LN 很好很强大。 选 C，表 approval；

Until about five years ago, the very idea that peptide hormones might be made anywhere in the brain besides the hypothalamus was astounding. But laboratory after laboratory found that antiserums to peptide hormones, when injected into the brain, bind in places other than the hypothalamus, indicating that either the hormones or substances that cross-react with the antiserums are present. The immunological method of detecting peptide hormones by means of antiserums, however, is imprecise. Cross-reactions are possible and this method cannot determine whether the substances detected by the antiserums really are the hormones, or merely close relatives. Furthermore, this method cannot be used to determine the location in the body where the detected substances are actually produced. New techniques of molecular biology, however, provide a way to answer these questions. It is possible to make specific complementary DNA's (cDNA's) that can serve as molecular probes to seek out the messenger RNA's (mRNA's) of the peptide hormones. The brain cells containing these mRNA's can then be isolated and their mRNA's decoded to determine just what their protein products are and how closely the products resemble the true peptide hormones.
(187 words)

11. Which of the following titles best summarizes the passage?
(A) Is Molecular Biology the Key to Understanding Intercellular Communication in the Brain?
(B) Molecular Biology: Can Researchers Exploit Its Techniques to Synthesize Peptide Hormones?
(C) The Advantages and Disadvantages of the Immunological Approach to Detecting Peptide Hormones
(D) Peptide Hormones: How Scientists Are

Attempting to Solve Problems of Their Detection
(E) Peptide Hormones: The Role Played by Messenger RNA's in Their Detection

12. The passage suggests that a substance detected in the brain by use of antiserums to peptide hormones may
(A) have been stored in the brain for a long period of time
(B) play no role in the functioning of the brain
(C) have been produced in some part of the body other than the brain
(D) have escaped detection by molecular methods
(E) play an important role in the functioning of the hypothalamus

13. Which of the following is mentioned in the passage as a drawback of the immunological method of detecting peptide hormones?
(A) It cannot be used to detect the presence of growth regulators in the brain.
(B) It cannot distinguish between the peptide hormones and substances that are very similar to them.
(C) It uses antiserums that are unable to cross the blood-brain barrier.
(D) It involves a purification process that requires extensive training in endocrinology.
(E) It involves injecting foreign substances directly into the bloodstream.

阅读 1：
先来段背景知识吧！
肽激素除了下丘脑能制造，在大脑中任何其它的地方都能够制造。大约五年前仅这一想法本身就是令人惊诧的。科学家认为，肽激素是由内分泌腺制造的，而下丘脑被认为是大脑中唯一的内分泌腺。而且，由于肽激素无法穿过血脑障碍，研究人员认为它们从不曾到过除下丘脑以外的大脑任何其它部位，肽激素仅在下丘脑制造出来，然后被释放到血管中。

但是关于肽激素的这种观点已经遭到质疑。通过一次又一次的实验发现，肽激素的抗血清一旦被注射到大脑中，它就会在下丘脑以外的地方粘接起来。这就说明这些地方或是有肽激素存在，或是有与抗血清发生交叉反应的其他物质存在。但是，通过抗血清来检验肽激素的免疫学方法是不精确的。交叉反应可能会发生，而且以这种手段无法确认用抗血清检测的特质确实是肽激素还是仅是与其近似的亲缘物质。另外，这种方法不能用来确定被测物质在人体内产生的部位。

然而，分子生物学的新技术为解决这些问题提供了一个新途径。科学家可以制造出一种特别的互补 DNA'S (cDNA's)，作为分子探子查找出肽激素的信使 RNA'S (mRNA's)。如果脑细胞正在制造肽激

素，那么它应该包含这些信使 RNA'S。如果脑细胞制造的产品与肽激素相似但并不完全相同，那么这些互补 cDAN'S 仍然会和这些信使 mRNA'S 粘结，但不会象和真正肽激素的信使 mRNA'S 结合得那么紧密，这些包含信使 mRNA'S 的细胞能被分开。研究者可以将信使 mRNA'S 解码以确定其蛋白质产品究竟是什么及这些产品在多大程度上类似于真正的肽激素。

采用 cDAN 探子这一分子生物学方法检测肽激素同时也比免疫学方法快得多，因为如果用免疫学方法，分离肽激素需要几年枯燥乏味的提纯过程，然后还需培养出他们的抗血清。罗伯茨的一番话表达了许多研究人员的心声，他说："我是作为一名内分泌学家接受训练的，但情况对我来说很清楚，内分泌学领域需要分子生物学的输入，靠碾磨来制造蛋白质纯化物的过程实在是太慢了。"

如果正如用 cDNA 探子所做的最初测试表明的那样，肽激素确实是由大脑中下丘脑以外的部位制造出来的，则有必要建立一套理论来解释它们在大脑中的作用。某些学者指出肽激素是生长调节剂，但罗森对老鼠大脑所作的实验表明事实并非如此。很多其它的研究人员指出肽激素或许被用于大脑内细胞与细胞间的信息传输

Q11：这是一道中心主旨题。全文从头至尾讨论的是"peptide hormones"在人体内产生的部位，所以有关全文中心主旨内容的答案应该包含"peptide hormones"。可见本题的正确选项应该是 D。

Q12：定位在 Line 13
"Furthermore, this method cannot be used to determine the location in the body where the detected substances are actually produced"
可以得出答案：C

Q13：定位在 Line 10:"this method cannot determine whether the substances detected by the antiserums really are the hormones"
不能确定侦测到的物质是否为 hormones，即不能 distinguish，得出 B 答案。