

Exercise 32

The recent change to all-volunteer armed forces in the United States will eventually produce a gradual increase in the proportion of women in the armed forces and in the variety of women's assignments, but probably not the dramatic gains for women that might have been expected. This is so even though the armed forces operate in an ethos of institutional change oriented toward occupational equality and under the federal sanction of equal pay for equal work. The difficulty is that women are unlikely to be trained for any direct combat operations; a significant portion of the larger society remains uncomfortable as yet with extending equality in this direction. Therefore, for women in the military, the search for equality will still be based on functional equivalence, not identity or even similarity of task. (132 words)

For the following question, consider each of the choices separately and select all that apply

1. The passage implies that which of the following is a factor conducive to a more equitable representation of women in the United States armed forces than has existed in the past?

- A The all-volunteer character of the present armed forces
- B The past service records of women who had assignments functionally equivalent to men's assignments
- C Restrictive past policies governing the military assignments open to women

阅读 1 : 参考翻译 :

美国全志愿武装力量的最近变化将使妇女在军队中的比例和承担任务的种类有所上升，但发展速度可能不及妇女们所预期的那么显著。即使军队的运行机制正向着职业平等方向转变而且受到同工同酬的联邦法律约束也是如此。这里的问题在于不太可能训练妇女执行直接的战斗任务，社会上的众多人士至今也还无法接受用这种方式来扩大平等。所以女军人所谋求的平等将依然是建立在权责对等基础上的平等，而不可能是任务同一甚至相似的平等。

Q1 : 定位至文中 The recent change to all-volunteer armed forces in the United States will eventually produce a gradual increase in the proportion of women in the armed forces and in the variety of women's assignments 所以答案 A。

注意：C选项的在文中只是 the federal sanction of equal pay for equal work , 而不是 governing the military

About a century ago, the Swedish physical scientist Arrhenius proposed a law of classical chemistry that relates chemical reaction rate to temperature. According to the Arrhenius equation, chemical reaction are increasingly unlikely to occur as temperatures approach absolute zero, and at absolute zero (zero degrees Kelvin, or minus 273 degrees Celsius) reactions stop. However, recent experimental evidence reveals that although the Arrhenius equation is generally accurate in describing the kind of chemical reaction that occurs at relatively high temperatures, at temperatures closer to zero a quantum-mechanical effect known as tunneling comes into play; this effect accounts for chemical reactions that are forbidden by the principles of classical chemistry. Specifically, entire molecules can "tunnel" through the barriers of repulsive forces from other molecules and chemically react even though these molecules do not have sufficient energy, according to classical chemistry, to overcome the repulsive barrier.

The rate of any chemical reaction, regardless of the temperature at which it takes place, usually depends on a very important characteristic known as its activation energy. Any molecule can be imagined to reside at the bottom of a so-called potential well of energy. A chemical reaction corresponds to the transition of a molecule from the bottom of one potential well to the bottom of another. In classical chemistry, such a transition can be accomplished only by going over the potential barrier between the wells, the height of which remains constant and is called the activation energy of the reaction. In tunneling, the reacting molecules tunnel from the bottom of one to the bottom of another well without having to rise over the barrier between the two wells. Recently researchers have developed the concept of tunneling temperature: the temperature below which tunneling transitions greatly outnumber Arrhenius transitions, and classical mechanics gives way to its quantum counterpart.

This tunneling phenomenon at very low temperatures suggested my hypothesis about a cold prehistory of life: the formation of rather complex organic molecules in the deep cold of outer space, where temperatures usually reach only a few degrees Kelvin. Cosmic rays (high-energy protons

and other particles) might trigger the synthesis of simple molecules, such as interstellar formaldehyde, in dark clouds of interstellar dust. Afterward complex organic molecules would be formed, slowly but surely, by means of tunneling. After I offered my hypothesis, Hoyle and Wickramasinghe argued that molecules of interstellar formaldehyde have indeed evolved into stable polysaccharides such as cellulose and starch. Their conclusions, although strongly disputed, have generated excitement among investigators such as myself who are proposing that the galactic clouds are the places where the prebiological evolution of compounds necessary to life occurred.

2. According to the passage, classical chemical reactions and tunneling reactions are alike in which of the following ways?

- (A) In both types of reactions, reacting molecules have to rise over the barrier between the two wells.
- (B) In both types of reactions, a transition is made from the bottom of one potential well to the bottom of another.
- (C) In neither type of reaction does the height of the barrier between the wells remain constant.
- (D) In neither type of reaction does the rate of a chemical reaction depend on its activation energy.
- (E) In both types of reactions, reacting molecules are able to go through the barrier between the two wells.

3. The author's hypothesis concerning the cold prehistory of life would be most weakened if which of the following were true?

- (A) Cosmic rays are unlikely to trigger the formation of simple molecules.
- (B) Tunneling occurs only in a narrow band of temperatures around zero degrees Kelvin.
- (C) The synthesis of interstellar formaldehyde can be activated by means other than cosmic rays.
- (D) Simple molecules can be synthesized by means of tunneling.
- (E) Classical chemical reactions do not occur at temperatures close to absolute zero.

4. Which of the following best describes the hypothesis of Hoyle and Wickramasinghe as it is presented in the

passage?

- (A) Cosmic rays can directly synthesize complex organic molecules.
- (B) The galactic clouds are the places where prebiological evolution of compounds necessary to life occurred.
- (C) Interstellar formaldehyde can be synthesized by tunneling.
- (D) Molecules of interstellar formaldehyde can evolve into complex organic molecules.
- (E) Complex organic molecules can be synthesized from stable polysaccharides such as cellulose and starch.

5. Which of the following best describes the organization of the first two paragraphs of the passage?

- (A) The author cites a basic principle of classical chemistry and then describes the research from which that principle was developed.
- (B) The author cites an apparent contradiction to the principles of classical chemistry and then explains the process of a chemical reaction to show there is in fact no contradiction.
- (C) the author describes the role of heat in chemical reactions and then offers a detailed explanation of its function.
- (D) The author presents a law of classical chemistry in order to introduce a kind of chemical reaction that differs from it and then explains the essential difference between the two.
- (E) The author presents the fundamental rules of classical chemistry in order to introduce an explanation of a specific chemical reaction.

Q2. 定位至文中 A chemical reaction corresponds to the transition of a molecule from the bottom of one potential well to the bottom of another In tunneling, the reacting molecules tunnel from the bottom of one to the bottom of another well 所以正确答案：B；

Q3. Cosmic rays (high-energy protons and other particles) might trigger the synthesis；A 是针对这个环节的取非。

Q4. Hoyle and Wickramasinghe argued that molecules of interstellar formaldehyde have indeed evolved into stable polysaccharides such as cellulose and starch

E 为干扰选项，谁形成谁的关系搞反了，答案 D；

Q5. 第一段先说了老的定律，然后第二段给了新的反例，答案 D；

One explanation for the tendency of animals to be more vigilant in smaller groups than in larger ones assumes that the vigilant behavior—looking up, for example—is aimed at predators. If individuals on the edge of a group are more vigilant because they are at greater risk of being captured, then individuals on average would have to be more vigilant in smaller groups, because the animals on the periphery of a group form a greater proportion of the whole group as the size of the group diminishes.

However, a different explanation is necessary in cases where the vigilant behavior is not directed at predators. J. Krebs has discovered that great blue herons look up more often when in smaller flocks than when in larger ones, solely as a consequence of poor feeding conditions. Krebs hypothesizes that the herons in smaller flocks are watching for herons that they might follow to better feeding pools, which usually attract larger numbers of the birds. (162 words)

6. It can be inferred from the passage that in species in which vigilant behavior is directed at predators, the tendency of the animals to be more vigilant in smaller groups than in larger ones would most likely be minimized if which of the following were true?

- (A) The vigilance of animals on the periphery of a group always exceeded that of animals located in its interior, even when predators were not in the area.
- (B) The risk of capture for individuals in a group was the same, whether they were located in the interior of the group or on its periphery.
- (C) Animals on the periphery of a group tended to be less capable of defending themselves from attack by predators than animals located in the interior of the group.
- (D) Animals on the periphery of a group tended to bear marks that were more distinctive to predators than animals located in the interior of the group.
- (E) Animals on the periphery of a group tended to have shorter life spans than animals located in the interior of the group.

For the following question, consider each of the choices separately and select all that apply

7. The passage provides information in support of which of the following assertions EXCEPT?

A Similar behavior in different species of animals does not necessarily serve the same purpose.

B Vigilant behavior aimed at predators is seldom more beneficial to groups of animals than to individual animals.

C The avoidance of predators is more important to an animal's survival than is the quest for food.

阅读 2 : 参考译文 :

译文:

一个关于小群体中的动物比大群体中的警觉性要高很多的解释是警惕行为——如张望——是针对食肉动物的。如果处在群体边缘的动物有更高的警惕性是因为他们可能被捕获的危险更大,那么平均而言,在小群体中的动物应有更高的警惕性,因为随着群体规模的缩小,处在群体周边的动物占整个群体的比例更高。

然而,一个不同的解释也是必要的,即警惕性并不直接和食肉动物有关。J·Krebs 发现,大蓝苍鹭在小群体中张望的频率要比在大群体中多,这仅仅是捕食情况较差的象征。Krebs 推断,在小群体中苍鹭眺望是为了寻找它们可能跟随的更好的伙伴去更好的觅食洼地,而这些地方一般会吸引大量的鸟类。

Q6 :

weaken 型的逻辑题。原推理,首段:在小群体中的动物应有更高的警惕性,因为随着群体规模的缩小,处在群体周边的动物占整个群体的比例更高。

∴B 正确。对一个群体中的个体来说被捕获的危险不论是处于群体的内部还是周边平均而言是相同的。直接否掉原观点。

A. 处于一个群体周边的动物的警觉性总要比处于内部的动物高,即使当食肉动物不在的时候。这支持原结论。

C. 在遭遇食肉动物袭击时,处于群体周边的动物保护自己要比处于内部的动物保护自己的能力强。无。

D. 处于群体周边的动物有比处于群体内部的动物更明显的让食肉动物识别的标记。无。

E. 处于群体周边的动物的寿命要比处于群体内部的少。无。

Q7 : 第一段和第二段的内容解释了 A , BC 没说 ; 答案 BC ;

8. The painter Peter Brandon never dated his works, and their chronology is only now beginning to take shape in the critical literature. A recent dating of a Brandon self-portrait to 1930 is surely wrong. Brandon was 63 years old in 1930, yet the painting shows a young, dark-haired man-obviously Brandon, but clearly not a man of 63.

Which of the following, if justifiably assumed, allows the conclusion to be properly drawn?

(A) There is no securely dated self-portrait of Brandon

that he painted when he was significantly younger than 63.

(B) In refraining from dating his works, Brandon intended to steer critical discussion of them away from considerations of chronology.

(C) Until recently, there was very little critical literature on the works of Brandon.

(D) Brandon at age 63 would not have portrayed himself in a painting as he had looked when he was a young man.

(E) Brandon painted several self-portraits that showed him as a man past the age of 60.

This is not to deny that the Black gospel music of the early twentieth century differed in important ways from the slave spirituals. Whereas spirituals were created and disseminated in folk fashion, gospel music was composed, published, copyrighted, and sold by professionals. Nevertheless, improvisation remained central to gospel music. One has only to listen to the recorded repertoire of gospel songs to realize that Black gospel singers rarely sang a song precisely the same way twice and never according to its exact musical notation. They performed what jazz musicians call "head arrangements" proceeding from their own feelings and from the way "the spirit" moved them at the time. This improvisatory element was reflected in the manner in which gospel music was published. (122 words)

9.The author mentions "folk fashion" most likely in order to

(A) counter an assertion about the role of improvisation in music created by Black people

(B) compare early gospel music with gospel music written later in the twentieth century

(C) make a distinction between gospel music and slave spirituals

(D) introduce a discussion about the dissemination of slave spirituals

(E) describe a similarity between gospel music and slave spirituals

10.Of the following sentences, which is most likely to have immediately preceded the passage?

(A) Few composers of gospel music drew on traditions such as the spiritual in creating their songs.

(B) Spirituals and Black gospel music were derived from the same musical tradition.

- (C) The creation and singing of spirituals, practiced by Black Americans before the Civil War, continued after the war.
- (D) Spirituals and gospel music can be clearly distinguished from one another.
- (E) Improvisation was one of the primary characteristics of the gospel music created by Black musicians.

阅读 1 :

Q8 : 以下哪个假设成立, 才能得出文中结论 ?

文中依据 :

1. Brandon 在 1930 年已经 63 岁了。

2. 画像是 Brandon 年轻时的样子。

结论 : Brandon 的自画像不是 1930 年画的。

所以, 只有假设 “Brandon 63 岁时不会画自己年轻时的样子” 成立, 才能推出结论。所以正确选项 D。

阅读 2 : 参考翻译 :

参考译文

音乐：关于美国黑人的福音音乐

不可否认, 20 世纪初美国黑人福音音乐在重要方面与美国黑奴圣歌不同。圣歌以民歌方式

创作和传播, 而福音音乐由专业人员谱曲、出版、获得版权和销售。然而, 即兴表演对福音音乐来说仍然是主要的。只要倾听福音歌曲录制的全部曲目, 就会了解到黑人福音歌手很少准确地以同样方式两次演唱同一歌曲, 并且从来也不依照确切的乐谱演唱。他们从当时自己的感情和“心灵”驱使的方式出发, 表演爵士音乐家称为“天资编排”的曲目。这种即兴表演因素反映在福音音乐出版的方式上。黑人福音音乐作曲家在完全为白人歌唱团编写的乐曲总谱中, 指明各种各样的声部和伴奏, 但是为黑人歌手创作的乐曲, 只包括一条谱线和钢琴伴奏。

Q9. 文章在做两者的比较, 提出其中一种的特点, 目的也还是为了比较; 答案 C ;

B 选项无中生有的多了一个限定 ;

Q10. 一直说不同点, 那么前一段正常来讲会说相同点, 答案 B ;