

第四节 Exercise 4

In a laboratory study, when bees are made to fly through tunnels with visual patterns on the walls, the distance they indicate in their dance corresponds to the complexity of the pattern to which they have been exposed. The researchers hypothesize that the dance reflects the bee's subjective experience, rather than a map of the external world and that the bees' perception of distance is largely a function of differences in their visual, subjective experience.

1. Which of the following, if true, most seriously undermines the researcher's hypothesis?
 - (A) Bees as subjects flying through the tunnels with pictures on the wall indicate the amount of distance by their various forms of dances.
 - (B) Bees as subjects flying through the tunnels with pictures on the wall do not vary their indications of the distance with different visual patterns.
 - (C) Bees in the experiment fail to respond to the directions of the visual images on the wall since those images are too perplexing and, in some cases, ambiguous.
 - (D) Bees in the experiment stumble upon the wall when the map shows there is light on the striking point.
 - (E) Bees in the other experiment show a certain similar behavior pattern but, to researchers' dismay, they stop flying whenever external intervention is withdrawn.

The high mobility of nineteenth-century Americans generally, and especially those under thirty years of age is well documented. The most common way to vary one's work was to move, if the youths did not want to see their fate sealed by their proficiency on one particular portion of the work. Those unacquainted with factory populations said that they possess as roving a disposition as the Tartars. But few remove because they are fond of changing their locations, though they go where they can get the best employment and the best wages. Hareven's thorough analysis of the payrolls of the Amoskeag Mills showed that the typical worker's career was short and frequently interrupted. Those whose years at Amoskeag were unbroken by any departure from the mills usually did not stay there long. The reasons for leaving were many: discharge, desire to try another job, pregnancy, an attempt to get a raise in pay, or anger at an overseer. In general, however, men left to search for better jobs; women left to care for other members of their families.

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

2. It can be inferred from the passage that the author would be likely to agree with which of the following are the factors for the transience of workers in the nineteenth-century America?
 - (A) Desire to get a better job and a better payment
 - (B) Disposition to wander around different factories
 - (C) Care for the family members
3. The author of the passage mentions Hareven's study of the payrolls of the Amoskeag Mills in order to
 - (A) emphasize Hareven's insightful observation that the career of average workers there did not last long and confronted intervention
 - (B) suggest that young workers left a factory for a variety of reasons
 - (C) anticipate the objection that the workers moved around the different factories for different reasons
 - (D) indicate that young worker moved not because of their migrant proclivities but because of other reasons
 - (E) blame the employers for removing the young workers repeatedly
4. The main purpose of the passage is to
 - (A) document the high mobility of nineteenth-century Americans
 - (B) explain the high transience of young workers in the nineteenth-century America
 - (C) highlight the difference between male workers and female workers
 - (D) refute the suggestion that young workers move because they have an innate disposition to do so
 - (E) discuss the fate of workers in the nineteenth-century America

Philopatry, the behavior returning to an individual's birthplace, has several advantages. The presence of kin in the natal area makes easier to receive help from related individuals; the level of aggression might be lower among kin than among unrelated individuals; breeding close to kin can also increase breeding success, as in the case of microtine rodents. However, this behavior may also result in an elevated probability of incestuous pairings. The fact that close inbreeding is rarely observed even in highly philopatric species suggests that animals have developed mechanisms to avoid breeding with close relatives and can discriminate between kin and non-kin via recognition.

One proposed mechanism by which animals can recognize unfamiliar relatives is phenotype matching, which involves learning the phenotype of familiar relatives, or of oneself, thereby forming a phenotypic template against which the phenotypes of unfamiliar individuals can be compared. Some animals might be using some form of phenotype matching: mice have been shown to use MHC odor type to avoid breeding with close relatives; olfactory cues also seem to be used by Arizona tiger salamanders and rainbow fish seem to use both visual and chemical cues to detect shoals of related individuals. Many studies, however, have found that individuals only recognize familiar kin.

A problem in investigating the behavior of settling close to kin is to exclude the possibility that they are philopatric because of benefits of settling in the natal area, rather than because of benefits of settling close to kin. The study of dispersal of relatives in colonially breeding seabirds and waterfowl is of particular interest in this context because virtually all species in this group share characteristics that are generally believed to promote the evolution of cooperation. Nonrandom dispersal within colonies of seabirds and waterfowl has been reported but is usually explained by philopatry to the natal nest site rather than by attraction to kin.

A recent study shows that the settling pattern of barnacle geese *Branta leucopsis* females returning to their natal colony is nonrandom with respect to the nest sites of their parents and sisters. Because breeding birds rarely changed nest sites between years, this natal philopatry could be caused by an attraction to the natal nest site itself or to the parents nesting there. However, females that settled on a different island than where their parents bred still settled close to their sisters. This clearly demonstrates that sisters' nesting close to each other is not a by-product of either extreme natal philopatry or a preference to nest close to parents, but results from a genuine preference for nesting close to kin. In addition, that females only nested close to sisters born in the same year (i.e., sisters that they had been in close contact with) also suggests that the clustering of female kin in barnacle geese does not result from phenotype matching.

5. The author might have to revise the conclusion that sisters' nesting close to each other is a result of a preference for nesting close to kin if which of the following might happen?
 - (A) Females that settled on an island other than where they were born still nest close to each other.
 - (B) Females that settled on an island other than where their parents bred build their nesting sites in a scattered pattern.
 - (C) Females that settled on a different island than where they were born cooperate to defend their territory, though separated.
 - (D) All females that settled on an island other than where they were born change the site of breeding in some year.
 - (E) Some females that settled on an island other than where they were born change the nesting sites, while others not.
6. The author mentions which of the following as the benefits of philopatry EXCEPT
 - (A) help from relatives
 - (B) reproductive success
 - (C) close inbreeding
 - (D) reduced antagonism
 - (E) nice neighbor
7. The author mentions the MHC odor type of mice probably in order to
 - (A) contrast with the olfactory cues used by Arizona tiger salamanders and the visual and chemical cues used by rainbow fish
 - (B) highlight the difficulty the phenotype matching hypothesis confronts
 - (C) stress the pressure of kin recognition of mice
 - (D) indicate the advantage of philopatry to mice
 - (E) provide partial support for phenotype matching hypothesis
8. Which of the following, if true, would support the phenotype matching hypothesis?
 - (A) Seabirds and waterfowl tend to cooperate in their breeding season.
 - (B) Barnacle geese females settle close to their sisters born in any years.
 - (C) Rainbow fish use MHC odor type to avoid breeding with their kin.
 - (D) Mice using MHC odor type reproduce more successfully than their relatives not using the same odor.
 - (E) Mice using MHC odor type still have other ways to prevent them from breeding with their relatives.

Why researchers have difficulties in uncovering ancient moneys has much to do with the practice of archeology and the nature of money itself.

Archeologists spend their careers sifting through the trash of the past, ingeniously reconstructing vanished lives from broken pots and dented knives. But like us, ancient Mesopotamians and Phoenicians seldom made the error of tossing out cash, and only rarely did they bury their most precious liquid assets in the ground. Even when archeologists have found buried cash, though, they have trouble recognizing it for what it was. Money doesn't always come in the form of dimes and sawbucks. It assumes many forms, from debit cards and checks to credit cards and mutual funds. The forms it took in the past have been, to say the least, elusive.

9. The passage contains information that would support which of the following statements about the money studied by the archeologists?

- (A) It assumed a variety of forms that are completely different from today's forms.
- (B) In the ancient societies, only wealthy citizens were flaunting money.
- (C) In the past, it greased the wheels of Mesopotamian commerce, spurred the development of mathematics, and helped officials and kings rake in taxes and impose fines.
- (D) It was often buried in the ground by the ancient rich people who accumulated the wealth by hoarding the precious noble metal.
- (E) Because of its elusive forms, it was not easy for archeologists to uncover and recognize.

The concentration of atmospheric methane is projected to increase significantly given the large pools of carbon stored in permafrost that can be converted to methane upon thaw, the susceptibility of methane hydrates to release from the ocean floor with rising seawater temperature and the acceleration of methane-producing anthropogenic activities. A recent study examines one particular source of atmospheric methane that may be significantly larger than previously recognized: ebullition (bubbling) from northern lakes. Careful measurements of the spatial and temporal patchiness of ebullition in Siberian thermokarst lakes revealed that total emissions from lakes were five times greater than earlier estimates. Furthermore, thaw of permafrost along lake margins releases labile organic matter previously sequestered in permafrost for centuries to millennia into anaerobic lake sediments, enhancing methane production and ebullition emission and serving as a positive feedback to climate warming.

10. The passage mentions which of the following are possible factors for increased concentration of atmospheric methane EXCEPT
- (A) the thawing of permafrost that may convert stored carbon to methane
 - (B) ebullition in Siberian thermokarst lakes and emission from other northern lakes
 - (C) the deflationary effect of feedback mechanism on climate warming
 - (D) human-engineered carbon emission that enhances methane production
 - (E) the mounting seawater temperature that triggers methane compounds to release from the ocean floor

第五节 Exercise 5

The direct detection of extrasolar planets is extraordinarily difficult, because of the enormous difference in luminosity between a star, which shines with its own light, and orbiting planets, which are not only much smaller and very close to the star, as seen from Earth, but shine by reflected light. The situation is akin to trying to identify a firefly buzzing around an intensely bright searchlight—from a great distance. At optical wavelengths, a star might be several billion times brighter than a large planet. However, at infrared wavelengths, where the planet emits its own thermal radiation, the contrast is only a factor of a million. Astronomers' best hopes of imaging an extrasolar planet are to "mask" the bright star, and hope to detect a faint infrared blip off to the side—another world. One method of masking is to insert an occulting disk in the telescope, which blocks the light from the central star. This method resulted in the telescope near-infrared images, where rings of dust have been discovered orbiting a particular star.

1. The author uses the analogue of identifying a firefly to
 - (A) emphasize the distinguishing feature of finding a firefly around an intensely bright light source
 - (B) compare the reflected light of planets and self-generating light of stars
 - (C) underscore the importance of infrared wavelength radiation for the detection of extrasolar planets
 - (D) illustrate the difficulty of identifying an extrasolar planet around a highly luminous star from an enormous distance
 - (E) give an example of the difficulty of detecting an extrasolar planet with current technology
2. Which of the following statements about the relationship between stars and extrasolar planets is supported by information given in the passage?
 - (A) They shine by different types of light, though emitting the same thermal radiation.
 - (B) They differ in luminosity because their lights are derived from different extraterrestrial bodies.
 - (C) They differ in luminosity because stars emit self-generated light while planets shine by borrowed light.
 - (D) Reflected light at optical wavelengths radiated from planets is entirely obscured by the light emitted from stars, so as to be invisible.
 - (E) An occulting disk in the telescope can help block out the central star, making it possible to detect visible light at the optical wavelength emitted by an extrasolar planet.

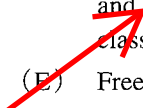

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Critics of Jean-Luc Godard's celebrated film *Breathless* wondered if its protagonist's weak acting and the film's general roughness are meant to be parodies of conventional acting and filmmaking. But such a diagnosis doesn't fit. Parody suggests consistent mockery in the service of a specific goal, usually that of puncturing pretension, with the immediate aim of getting a laugh. But *Breathless* is more pretentious in its low-key way than any film-noir production that it could be said to parody. It doesn't ramp up but brings down and scatters conventional elements. Although there are several scenes that some viewers might find humorous, this humor is of the whimsical not the parodic variety.





Critics today are also inclined to see this French film as an example of reality cinema. The insouciant attitude that *Breathless* takes toward its audience may encourage impressionable viewers to mistake it for realism, but there is nothing about the characters' talk or behavior that corresponds to the way people actually talk or behave, even in France.

The best way to understand *Breathless* is to reconsider its genre—that is, to approach it primarily as a work of ideas rather than as a work of art. The British critic Matthew Arnold, in his 1864 essay “The Function of Criticism in the Present Time,” noted that art and criticism are distinct but mutually supportive genres, and that the relative merit of each may vary in different eras and in different cultures. The French, he argued, tend to be drawn to ideas, while the English distrust them, with the result that English art is often less intellectually informed than one would wish (even the great Wordsworth, he added, would have done well to read more books). A corollary, which Arnold doesn't pursue, is that French art tends to be overlaid with ideas, to be more like criticism than art—an assumption that pertains well to *Breathless*.

The sequence of shifting signifiers used in the film also corresponds to ideas about meaning that the linguistic philosopher Jacques Derrida was developing, under the name of deconstruction, during the same period. In deconstructionist terms, then, the film's sloppiness becomes a value, a way of exposing both the arbitrary *constructedness* of past meaning and the opportunities for making new meaning in the future. The former constitutes the political dimension of the film insofar as it critiques what has been done in the name of cinema, society, capitalism, or whatever. The latter is the theoretical dimension, the film's way of demonstrating what is possible if one lets loose from old constraints and assumptions. Godard's film can be viewed as the critical antecedent to a new era in which movies were freed from the constraints of classic Hollywood cinema.


3. Based on the information in the passage, which of the following statements about the perspective of deconstruction in the interpretation of the film could be true?
- (A) From deconstructionist perspective, the film's shifting scenes could be a reflection of transitory and nihilistic character of established tradition and culture.
 - (B) From deconstructionist perspective, the film's unsystematic or casual arrangement could be a valuable way of exposing the autocratic and whimsical characters of constructed establishment in politics and theory.
 - (C) A deconstructionist interpretation could liberate the film from its confined and stilted scenes and reveal its promising implication in the sociopolitical arena.
 - (D) A deconstructionist interpretation betrays the ideal of Jacques Derrida who advocates a valuable combination of theoretical critique and political reflection in the criticism of classic Hollywood cinema.
 -  (E) Free from the conventional constraints and assumptions, the film could be envisioned as anticipating a new era in which movies are created from a random patchwork piecing together diverse, heterogeneous elements haphazardly.
4. The author discusses Matthew Arnold's essay "The Function of Criticism in the Present Time" in the third paragraph primarily in order to do which of the following?
- (A) Prove that art and criticism are different but mutually supportive genres
 - (B) Argue that the relative merit of art and criticism may vary in different time periods and in different cultures
 - (C) Highlight the crucial divergence between English art and French art
 -  (D) Indicate that the film *Breathless*, as a French art, is awash with ideas, closer to criticism than art
 - (E) Criticize Arnold for failing to draw from his ideas an important conclusion

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

5. The information provided in the passage indicates that parody of traditional acting and filmmaking might include which of the following as its features?
-  (A) Consistent mockery
 -  (B) Whimsical humor
 -  (C) Aim to trigger a laugh
6. Which of the following best describes the organization of the passage as a whole?
-  (A) Two views are devalued, an alternative view is presented and substantiated.
 - (B) A hypothesis is presented, a better alternative partly based on the hypothesis is discussed, and the new hypothesis is evaluated in light of new evidence.
 - (C) Two views are compared and contrasted, evidence that undercuts these two views is then presented, and a new view that may better interpret the subject is discussed.
 - (D) A tentative view is refuted, a revised view is presented and challenged, and a third view that combines previous two views is suggested and yet to be confirmed.
 - (E) Two views are questioned, a relatively new view is introduced, but then supplanted by a more recent view.

Historians have devised different methods to estimate the levels of immigration in the eighteenth-century America. Using tenuous fertility and mortality data compiled by other historians, Gemery calculates net migration as a residual, with the results being a plausible range of 278,400 to 485,300 white immigrants for the period 1700 to 1780. An alternative method, however, relies on an improved surname analysis of the 1790 census as a check for the increasing expertise of ethnic group historians who rely on actual immigration data from ship and passenger lists. Despite some gaps, this method produces enlightening results for most ethnic groups during the period – 585,800 immigrants (278,400 blacks and 307,400 whites), roughly consistent with Gemery's finding.

7. According to the passage, the residual method used by Gemery differs from the alternative method in that it

- (A) relies on the fertility and mortality data about immigrants that have previously been inaccessible
- (B) produces a total number far larger than the total number generated by the alternative method
- (C) yields a more accurate estimate than the alternative method
- (D) eschews the sketchy fertility and mortality data that the alternative method draws on
-  (E) does not exploit the immigration data of ethnic groups from ship and passenger lists

A new class of insecticides known as neonicotinoids is broadly and commonly used in most cropping systems and on turf and forest pests. But one of the compounds in this class, imidacloprid, was banned in France, because it is acutely toxic to bees and because sub-lethal doses have been shown to impair honey bee short-term memory.

8. Which of the following, if true, most strongly supports the French policy about imidacloprid?
- (A) Short-term memory is critical to bee's navigational abilities necessary for foraging flights and for returning to the hive.
 - (B) Short-term memory is an essential part of bee's cognitive repertoire as is long-term memory.
 - (C) Short-term memory and long-term memory function simultaneously when bees fly and navigate.
 - (D) Environmentalists oppose the widespread use of imidacloprid for fearing its unintended consequences for the turf and forest pests.
 - (E) Government policy-makers have not yet reached a final rejection of imidacloprid since its effects have not been extensively investigated.

Some factors have been suggested as causal mechanisms of bee colony collapse disorder, for example, the use of genetically modified (GMO) crops. However, large bee die-offs have also occurred in Europe, where GMO crops are not widely grown. Also, in the United States, the patterns of CCD-affected colonies do not appear to correlate with the distribution of GMO-crops such as Bt-corn. Other hypotheses are even less likely. For example, the public has become concerned that cell phone use may be causing bee die-offs; however, exposure of bees to high levels of electromagnetic fields is unlikely. Similarly, shifts in the Earth's magnetic field, which could conceivably affect bee navigation, have not been correlated with bee die-off episodes, but cannot be completely ruled out at this time.

9. Which of the following best describes the main idea of the passage?

- ☒ (A) Several factors, such as GMO crops, cell phone use and change in the magnetic field, cannot explain why bee colony collapses in disorder.
- (B) Scientists have dismissed several theories of bee colony collapse disorder because of their lack of strong experimental evidence and solid theoretical framework.
- (C) Scientists failed to explain the collapse of bee colony because they cannot easily measure the impact of cell phone use on the alteration of electromagnetic fields.
- (D) The use of GMO crops did not bring about large bee die-offs more than the shifts in the Earth's magnetic field.
- (E) The reason that proposed hypotheses cannot explain large bee die-offs is that they cannot establish the correlation between the pattern of colony collapse and the putative factors.

10. It can be inferred from the passage that the GMO-crops hypothesis would have been more convincing if researchers had been able to

- (A) prove that exposure of bees to high levels of electromagnetic fields does not correlate with large bee die-offs in Europe
- (B) demonstrate that the changes in the Earth's magnetic field, though affecting bee navigation, do not vary with the periods of bee die-offs
- ☒ (C) demonstrate that the pattern of bee colony collapse correspond to the demographical mode of genetically modified crops
- (D) dismiss the hypotheses that explain the bee colony collapse disorder by invoking the non-European evidence
- (E) make extensive laboratory and field testing to indicate a lack of acute and sub-lethal effects on bees exposed to GMO-pollen

第六节 Exercise 6

Diffusible compounds released by algae may mediate coral mortality via microbial activity. Algae can release excess photosynthate in the form of polysaccharides, or dissolved organic carbon, that can fuel microbial activity and accelerate microbial growth. The microbial community growing on or near the coral surface may then exhibit explosive growth, eventually creating a zone of hypoxia on the surface of the live coral tissue. In this study, all corals exposed to but not in direct contact with algae bleached and were physiologically compromised within 2–4 days. Clearly, some algae may release chemical compounds that may be toxic to other organisms. But here, coral mortality could be completely prevented with the addition of antibiotics, thus supporting the hypothesis that the microbial community was the agent of coral death.

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

1. Given the information given in the passage, it can be inferred that which of the following statements is true of the zone of hypoxia on the surface of the live coral tissue?
 - (A) The live corals in the zone of hypoxia would be physiologically suffered within several days.
 - (B) The zone of hypoxia is awash in chemical compounds released by algae that are directly harmful to corals.
 - (C) The deleterious effect on corals of hypoxia area generated by a microbial community can be counterbalanced by the addition of antibiotics.
2. Which of the following, if true, would most weaken the hypothesis proposed in the passage?
 - (A) Corals generally show significant declines in health when placed next to algae without antibiotics.
 - (B) Not all coral species are equally susceptible to algal mediated mortality and not all algae have deleterious effects on corals.
 - (C) A significant input of dissolved organic carbon that facilitates the growth of microbes comes either from the algae themselves or from anthropogenic sources (e.g. waste water).
 - (D) On healthy reefs, corals are the dominant, habitat forming organisms and algae are kept at low levels of standing biomass via intense grazing.
 - (E) A new experiment discovers that increased organic carbon loading directly kill corals and that coral mortality caused by organic carbon loading is negatively correlated with an increase in microbial activity.

Unlike the traditional qualitative approaches to acculturation, Padilla presented a multidimensional and quantitative model of acculturation that relied on cultural awareness, i.e., implicit knowledge that individuals have of their cultures of origin and of their host cultures. If individuals show more knowledge of their heritage cultures than they do of the new contact cultures, they are less acculturated, and vice versa. But like those major theories of acculturation, this model did not take into consideration individual differences and personality characteristics that facilitate or retard acculturation. Certainly, Padilla's emphasis on the preference of individuals for the dominant or heritage cultures is an important advance. But the model falls short of explaining how individuals from the same socioeconomic, generational, and familial backgrounds differ on willingness and competence to acculturate.

3. Select the sentence in the passage in which the author qualifies the disapproval of Padilla's model in explaining how individual differences and personality characteristics influence the rate of acculturation.

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

4. It can be inferred from the passage that which of the following descriptions would be true of conventional approaches to acculturation?
- (A) The traditional theories of acculturation would argue that if the persons possess more knowledge of the host cultures, then they are less acculturated.
 - (B) The traditional theories of acculturation have not provided the quantitative hypothesis of how acculturation takes place.
 - (C) The traditional theories of acculturation have yet to appreciate and explain individual differences within the demands of cultural and sociopolitical contexts.

Carbohydrate causes the elevation of transmitter serotonin in the brain, which can fuel neuron activity and stimulate behavior. Scientists propose reducing carbohydrate in the diet for patients of neuronal oversensitivity and increasing protein, which can suppress the production and release of transmitter serotonin. However, the low level of serotonin might induce a strong craving for carbohydrate and finally minimize the effect of high protein diet. Thus the scientists' proposal does not work.

5. Which one of the following, if true, most supports the scientists' proposal?
- (A) Some patients who crave for carbohydrate reported they feel sleepy after a diet containing mostly carbohydrate.
 - (B) Some patients who do not crave for carbohydrate reported they feel refreshed after a diet containing mostly protein.
 - (C) The consumption of protein indirectly decreases blood concentration of tryptophan which is the only precursor of serotonin in the brain.
 - (D) The high level of serotonin in the brain can facilitate neuronal activity and produce strong emotional and behavioral responses.
 - (E) A high protein diet, though benefiting physical health, turns out to have other detrimental effects on mental health.

The cooling rate of a magma determines the texture of the final rock. As a magma cools, the specific cations and anions that ultimately form solid crystals must initially bond with one another to form very small crystal nuclei. Scientists have determined the general relationship between cooling rate and the total number of crystal nuclei. Slow cooling rates generally form only a small number of crystal nuclei, and, with abundant time for crystal growth, lead to a coarse grained rock dominated by large crystals. As the cooling rate increases, so does the number of crystal nuclei; the result is a fine grained rock that contains numerous small crystals. Finally, very fast cooling rates can lead to a situation where no crystals grow. Not remaining liquid, the magma solidifies to a dark-colored solid — volcanic glass. It is analogous to the man-made glass; the only difference is that man-made glass is formed from compositionally “simple” magma whereas volcanic glass is derived from a compositionally complex natural magma.

6. The passage is primarily concerned with discussing
 - (A) the different roles of crystal nucleus and cooling rate in the formation of the final rock
 - (B) the difference and similarity between and among three types of crystal nuclei
 - (C) the difference and similarity between and among three kinds of textures of rocks
 - (D) the general relationship between cooling rate of magma and the texture of the final rock
 - (E) the particular chemical composition in a magma and its effect on the texture of the final rock
7. Given the information in the passage, which of the following statements is true of volcanic glass?
 - (A) It is completely different from man-made glass in that it includes crystals within itself.
 - (B) It is a simple magma because of its simple chemical composition.
 - (C) It forms at a specific rate at which the magma cools.
 - (D) It defies the general relationship between cooling rate and the number of small crystal nuclei.
 - (E) It verges on the phase boundary of liquid and solid before it evolves into a critical state.

When 1,000 people who have not smoked or smoked only in a short time are tested for lung cancer, only 10 show early signs of lung cancer. By contrast, of every 1,000 people who have smoked frequently 750 show early signs of lung cancer. Thus, for a randomly chosen group of people, the majority of those who show early signs of lung cancer will be people who have smoked frequently.

8. A reasoning error in the argument is that the argument
- (A) identifies the group who have smoked frequently with the group who have shown early signs of lung cancer.
 - (B) fails to take into account what proportion of the population have smoked frequently
 - (C) ignores the fact that some people who smoked frequently have not shown early signs of cancer
 - (D) attributes early signs of lung cancer to smoking
 - (E) attempts to infer a strong conclusion from a shaky premise

A sudden intense surge in anxiety is characterized by arousal of the sympathetic branch of the autonomic nervous system as expressed in elevated heart and breathing rates, blood pressure, sweating, and other signs. This led to the expectation that N (neuroticism) personality or trait anxiety would be related to measures of these indicators. Research has failed to support this correlational hypothesis. Longitudinal research has shown that N is a personality precursor of anxiety and mood disorders, so why does N not show relationships with some of the same biological indicators that characterize these disorders? There may be a threshold effect so that the dysregulation of neurotransmitter systems characteristic of the disorders only emerges at some critical level of persistent stress that is not reproducible in controlled laboratory studies.

9. Which of the following statements best describes the organization of the passage as a whole?
- (A) A situation is described and explained, and a new hypothesis is provided to supplant the previous one.
 - (B) An assertion is made and several arguments are provided to strengthen it and dismissed.
 - (C) A theory is discussed and then ways in which it has been revised are described.
 - (D) A fact is stated, a hypothesis is suggested and fails to be proved, and its failure is explained.
 - (E) A controversial theory is discussed and then arguments both against and for it are described.
10. It can be inferred from the passage that the necessity of threshold effect hypothesis stated in the last sentence would need to be reassessed if researchers found that which of the following were true?
- (A) The dysregulation of neurotransmitter systems characteristic of the anxiety and mood disorders does not emerge below a certain critical level of persistent stress simulated in laboratory studies.
 - (B) The study attempting to find a biological basis for the anxiety and mood disorders obtains the positive results in experimental research with animals and with humans that suffer from anxiety and mood disorders.
 - (C) N shows the negative relationship with some of the same biological indicators that characterize anxiety and mood disorders.
 - (D) N shows the positive relationship with some biological indicators that are not typical of anxiety and mood disorders.
 - (E) N is demonstrated to be related to measures of these indicators in reaction to persistent stress in a masterfully designed laboratory study.

答案：

Exe 4 : B A C D B B

C E B E C

Exe 5: D C B D A C

A E A A C

Exe 6: A C E

"Certainly, Padilla's emphasis ..."

B C C

D C B D E