

Inferences

Question 1

A 2021 study by Rodriguez et al. on the migratory patterns of the eastern North American *Danaus plexippus* population, commonly known as the monarch butterfly, investigated potential climate change impacts. The study focused on the phenological timing of the butterflies' fall migration and the availability of their crucial nectar sources, particularly milkweed (*Asclepias* species), throughout their migration route. Researchers observed a statistically significant trend: the peak timing of the monarch butterfly fall migration was occurring later in the year compared to historical data. Simultaneously, data indicated that the availability of necessary *Asclepias* species along the migratory path did not exhibit a corresponding shift. This suggests that _____

Which choice most logically completes the text?

- A** the monarch butterflies are successfully adapting their migration timing to align with the changing availability of their primary food source, *Asclepias* species.
- B** the delayed fall migration of *Danaus plexippus* could lead to a mismatch between the butterflies' arrival and the peak availability of critical *Asclepias* species nectar sources.
- C** climate change is exclusively impacting the migration timing of *Danaus plexippus* and has no discernible effect on the phenology of *Asclepias* species.
- D** the historical data on monarch butterfly migration timing is likely inaccurate, as current observations show a significant deviation from

past patterns.

Question 2

In his seminal work *Hamlet and Oedipus* (1949), Ernest Jones, following Sigmund Freud, posited a psychoanalytic interpretation of William Shakespeare's *Hamlet*. Jones argued that Hamlet's indecisiveness and conflicted state stem from an unresolved Oedipus complex. According to this theory, Hamlet unconsciously desires his mother, Gertrude, and resents his uncle, Claudius, not merely for murdering his father, King Hamlet, but for succeeding where Hamlet unconsciously wished to succeed. This repressed desire, according to Jones, manifests as Hamlet's inability to act decisively against Claudius, suggesting that _____.

Which choice most logically completes the text?

- A** Hamlet's outward behavior and conscious motivations are a direct reflection of his hidden, unconscious psychological conflicts.
- B** the play *Hamlet* is primarily an exploration of universal themes of revenge and familial duty, rather than individual psychology.
- C** Hamlet's delay in avenging his father is better explained by the political complexities of the Danish court than by internal psychological factors.
- D** the psychoanalytic approach, while insightful, cannot fully account for the multifaceted nature of Hamlet's character and actions.

Question 3

In their foundational 1979 work, Daniel Kahneman and Amos Tversky developed prospect theory, a descriptive model of decision-making under risk. A key tenet of this theory is that individuals evaluate potential outcomes relative to a reference point, which often represents their current state or expectations. Outcomes above this reference point are perceived as gains, while those below are perceived as losses. The theory posits that people exhibit loss aversion, meaning the psychological impact of a loss is greater than that of an equivalent gain. This leads individuals to be risk-averse concerning potential gains but risk-seeking concerning potential losses, relative to their reference point. This suggests that _____.

Which choice most logically completes the text?

- A** the absolute value of a potential gain or loss is the primary factor influencing an individual's decision under risk.
- B** how a decision is framed as involving potential gains or losses relative to a reference point significantly impacts an individual's willingness to take risks.
- C** individuals consistently make rational choices that maximize their expected utility, regardless of how the options are presented.
- D** the concept of a reference point is less important in understanding risk-taking behavior than the magnitude of the potential outcomes.

Question 4

In their seminal work, Daniel Kahneman and Amos Tversky (1974) introduced the concept of the anchoring effect, a cognitive bias where individuals rely too heavily on the initial piece of information offered (the "anchor") when making decisions, even if that information is irrelevant. Subsequent judgments are then made by adjusting away from this anchor, though typically insufficiently. This bias is particularly relevant in contexts involving numerical estimations or valuations. Dan Ariely, in his book *Predictably Irrational* (2008), explores this phenomenon in consumer behavior. He describes experiments demonstrating how an arbitrarily presented number, such as the last two digits of a social security number, can significantly influence participants' willingness to pay for various items in a simulated auction. Those with higher social security number endings placed significantly higher bids. This suggests that _____.

Which choice most logically completes the text?

- ☐ A the anchoring effect is a relatively weak cognitive bias that is easily overcome by rational deliberation in consumer purchasing decisions.
- ☐ B consumers' final willingness to pay for a product is determined solely by the initial anchor they encounter, regardless of other factors.
- ☐ C even irrelevant numerical information can establish a mental benchmark that influences subsequent financial valuations made by consumers.
- ☐ D the study conducted by Dan Ariely contradicts the earlier findings of Kahneman and Tversky regarding the pervasiveness of the anchoring effect.

Question 5

In their 2001 study, Andre Kessler and Ian T. Baldwin investigated the defensive responses of wild *Nicotiana attenuata* plants to herbivory by *Manduca sexta* caterpillars. They found that when *N. attenuata* leaves were damaged by *M. sexta*, the plants released a complex blend of volatile organic compounds (VOCs).

Neighboring, undamaged *N. attenuata* plants exposed to these VOCs showed increased levels of defensive compounds, such as protease inhibitors, which deter *M. sexta* feeding. Further research by Kessler and Baldwin (2006) demonstrated that this airborne signaling resulted in *priming*—a state where the receiver plant is better prepared to mount a defense upon subsequent herbivore attack, suggesting that _____.

Which choice most logically completes the text?

- A** the release of volatile organic compounds by *Nicotiana attenuata* directly elicits full defensive responses in undamaged neighboring plants, even without subsequent herbivore attack.
- B** exposure to herbivore-induced volatile organic compounds emitted by damaged plants prepares nearby undamaged plants to defend themselves more effectively if they are subsequently attacked by herbivores.
- C** *Manduca sexta* caterpillars are repelled by the volatile organic compounds released by damaged *Nicotiana attenuata* plants, causing them to seek out undamaged plants.
- D** the increased levels of defensive compounds observed in neighboring *Nicotiana attenuata* plants are solely a direct result of the volatile organic compounds themselves, not an indication of a primed state.

Question 6

In his seminal 1927 study, *The Road to Xanadu*, John Livingston Lowes meticulously traced the vast network of literary sources that likely informed Samuel Taylor Coleridge's poems, *The Rime of the Ancient Mariner* and *Kubla Khan*. Lowes argued that Coleridge's prodigious reading, spanning obscure travel narratives, scientific treatises, and theological texts, was absorbed and transmuted by his subconscious, later resurfacing as the vivid imagery and complex symbolism found in these works. More recent scholarship, such as Richard Holmes's 2005 biography of Coleridge and Marina Warner's analyses, while acknowledging Lowes's foundational contribution to source studies, have also explored the psychological and biographical contexts of Coleridge's creative process. These later interpretations often emphasize the role of Coleridge's personal struggles and mental state, particularly his use of opium, in shaping the visionary and fragmented nature of *Kubla Khan*, suggesting that _____.

Which choice most logically completes the text?

- A** the disparate literary sources identified by Lowes are less significant than previously thought in understanding the genesis of Coleridge's imaginative world.
- B** Coleridge's reliance on opium was the sole or primary factor influencing the specific content and themes present in *Kubla Khan*.
- C** Coleridge's psychological state and personal experiences likely interacted with and influenced how his reading was processed and manifested in his poetry.
- D** the fragmented structure of *Kubla Khan* is primarily a deliberate artistic choice rather than a consequence of interruptions during its composition.

Question 7

Research by Hans Slabbekoorn and Eryn Halfwerk in 2009 investigated the vocal adjustments of urban Great Tits (*Parus major*) to anthropogenic noise. They found that in areas with significant low-frequency traffic noise, these birds tended to sing songs with higher minimum frequencies compared to those in quieter, more natural environments. This upward shift in frequency is often hypothesized to be an adaptation to avoid acoustic masking by the dominant low-frequency urban sounds, thereby improving signal transmission and reception for communication purposes such as attracting mates or defending territories. The study observed this difference even within relatively small geographical areas with varying noise levels. This suggests that _____.

Which choice most logically completes the text?

- A** *Parus major* birds in urban environments are likely to exhibit lower overall song amplitudes compared to their counterparts in quieter habitats due to the need to conserve energy.
- B** The physical structure of urban environments, beyond just noise, significantly influences the maximum frequency of *Parus major* songs.
- C** Individual *Parus major* birds can adjust their song characteristics in response to the specific noise conditions of their immediate surroundings.
- D** The observed shift to higher minimum frequencies in urban *Parus major* songs is the primary factor enabling successful communication in noisy environments.

Question 8

Early critical reception of Impressionism in the 1870s, as exemplified by Louis Leroy's scathing review of the 1874 exhibition, often derided the works as mere *impressions*, lacking the academic finish and narrative clarity valued by the *Académie des Beaux-Arts*. Paintings like Claude Monet's *Impression, soleil levant* were dismissed for their visible brushstrokes and unconventional compositions, perceived as a departure from established artistic principles. However, subsequent art historical scholarship, notably the work of John Rewald in the mid-20th century and later re-evaluations by scholars such as Linda Nochlin, repositioned Impressionism not as a flawed deviation but as a pivotal movement. This suggests that _____

Which choice most logically completes the text?

- A the initial critics of Impressionism failed to recognize the artists' profound technical skills, which were only fully appreciated by later generations of scholars.
- B the critical standards applied to evaluating artistic movements are inherently subjective and change significantly across different historical periods.
- C characteristics initially deemed artistic deficiencies, such as visible brushwork, came to be understood as intentional innovations challenging prevailing artistic conventions.
- D the *Académie des Beaux-Arts* eventually incorporated elements of Impressionistic style into its own curriculum due to public demand for the new aesthetic.

Question 9

Richard E. Nisbett, Kaiping Peng, Incheol Choi, and Ara Norenzayan's 2001 study investigated cross-cultural differences in cognitive processing, specifically examining how individuals from East Asian and Western cultural backgrounds perceive visual information. Participants were presented with animated scenes featuring a prominent focal object within a complex environment. Researchers observed that East Asian participants consistently described and recalled more background elements and the relationships between various components of the scene, whereas Western participants predominantly focused on and remembered the attributes of the central, salient objects. This divergence highlights distinct attentional patterns, with holistic processing prioritizing contextual information and interconnections, while analytic processing emphasizes discrete entities. This suggests that _____

Which choice most logically completes the text?

- A** the cultural frameworks individuals inhabit profoundly influence their initial attentional allocation and subsequent encoding of visual information, especially regarding the prominence of contextual versus focal elements.
- B** individuals from Western cultures are generally less capable of processing complex visual information than their East Asian counterparts, resulting in a narrower scope of recall.
- C** the ability to recall specific background details from animated scenes is primarily determined by an individual's innate visual processing capabilities rather than their cultural upbringing.
- D** cross-cultural variations in cognitive processing are most evident when individuals are exposed to novel or unfamiliar visual stimuli, rather than common scenes.

Question 10

Sophocles' Antigone, a cornerstone of classical Greek drama, has historically been interpreted as a stark exploration of immutable divine law confronting transient human decree, often personified by the tragic figures of Antigone and Creon. This traditional reading, prevalent since the Renaissance and crystallized in the philosophical critiques of G.W.F. Hegel, underscored the play's universal moral dichotomies. However, more recent scholarship, particularly exemplified by analyses from Martha Nussbaum in The Fragility of Goodness (1986) and George Steiner in Antigones (1984), has challenged this monolithic interpretation. These contemporary readings often pivot towards a nuanced understanding of Antigone's complex political landscape, the psychological motivations of its characters, and the problematic nature of justice itself, suggesting that _____

Which choice most logically completes the text?

- A** the play's enduring relevance primarily stems from its portrayal of conflicts between individual conscience and state authority, a theme consistently highlighted across all periods of critical inquiry.
- B** earlier interpretations of *Antigone* largely failed to acknowledge the fundamental clash between cosmic order and human governance, a central tension in the work.
- C** prior scholarly approaches to *Antigone* tended to oversimplify the multifaceted thematic and dramatic concerns present within the play.
- D** the development of modern literary theory has primarily focused on discrediting all prior interpretations of ancient Greek tragedies, including *Antigone*.

Question 11

Pine trees (Genus: *Pinus*) employ sophisticated defense mechanisms against bark beetle (Family: Curculionidae, Subfamily Scolytinae) infestation, primarily involving the production and exudation of oleoresin, a complex mixture of terpenes. This resin physically impedes beetle boring and chemically contains toxic or deterrent compounds. Healthy trees can often "pitch out" attacking beetles with a vigorous flow of resin. However, stressed or weakened trees exhibit reduced resin production and flow, making them more susceptible to successful colonization. Studies on *Dendroctonus frontalis*, the southern pine beetle, have shown that mass attacks, where a large number of beetles simultaneously assault a single tree, can overwhelm even the defenses of a healthy tree. This suggests that the efficacy of a pine tree's oleoresin defense against bark beetle infestation is significantly influenced by _____.

Which choice most logically completes the text?

- A** the collective action of multiple attacking bark beetles rather than solely the individual tree's defensive capacity.
- B** the specific species of *Pinus* tree and the particular species of bark beetle involved in the interaction.
- C** the prior exposure of the *Pinus* tree to other environmental stressors, such as drought or disease.
- D** the presence of symbiotic fungi carried by the bark beetles that may help overcome the tree's defenses.

Question 12

Studies of plant-pollinator interactions often focus on the phenological overlap between flowering periods and pollinator activity. A recent study investigated the relationship between the flowering phenology of the perennial herb *Campanula rotundifolia* and the activity period of its primary solitary bee pollinator, *Megachile campanulae*, across several sites. The researchers found significant variation in the degree of phenological synchrony across these sites. At sites where *C. rotundifolia* bloomed earlier in the season, there was a greater overlap with the period when *M. campanulae* was actively foraging. Conversely, at sites where *C. rotundifolia* bloomed later, the overlap was considerably reduced. This suggests that _____.

Which choice most logically completes the text?

- A** the timing of *Megachile campanulae*'s activity is solely determined by the flowering time of *Campanula rotundifolia*.
- B** a reduced overlap between *Campanula rotundifolia* flowering and *Megachile campanulae* activity would likely result in increased reproductive success for *C. rotundifolia*.
- C** the reproductive success of *Campanula rotundifolia* could be negatively impacted at sites where its flowering period is not well-synchronized with the active period of *Megachile campanulae*.
- D** *Campanula rotundifolia* has evolved to precisely synchronize its flowering time with the peak activity of *Megachile campanulae* across all environments.

Question 13

Mahzarin Banaji and Anthony Greenwald's 1998 work on implicit social cognition introduced the *Implicit Association Test* (IAT) as a method to measure attitudes and beliefs that individuals may not be able or willing to report consciously. This approach posits that past experiences, even those not consciously remembered, can influence judgment and behavior. For example, research by Jennifer Eberhardt (2016) and colleagues has demonstrated how unconscious biases, potentially captured by measures like the IAT, can manifest in discriminatory outcomes, such as disparities in school discipline or perceptions of threat. These findings suggest that processes operating outside of conscious awareness can significantly shape social interactions and systemic inequalities, which implies that _____.

Which choice most logically completes the text?

- A** self-report measures are generally ineffective in capturing any form of bias, whether conscious or unconscious.
- B** conscious reflection is sufficient to overcome the influence of implicit biases on behavior and judgment.
- C** individuals are always aware of the underlying reasons for their judgments and behaviors in social contexts.
- D** disparities in social outcomes may stem from cognitive processes that are not accessible through conscious introspection.

Question 14

A study by Lars Eisen and colleagues in 2016 investigated the environmental factors influencing the range expansion of the tick *Ixodes scapularis*, a primary vector for *Borrelia burgdorferi*, the bacterium causing Lyme disease. The study highlighted that while various factors, including host availability and habitat suitability, play a role, temperature is a particularly critical determinant for *I. scapularis* survival and activity. Specifically, the researchers noted that warmer temperatures can lead to faster tick development and a longer season of activity, increasing the potential for human exposure to infected ticks. Given the observed northward expansion of *I. scapularis* populations in North America, this suggests that _____

Which choice most logically completes the text?

- A** increasing average temperatures in northern regions are contributing to the geographic spread of *Ixodes scapularis*.
- B** the availability of suitable host animals for *Ixodes scapularis* is the primary factor driving its range expansion.
- C** control methods targeting *Borrelia burgdorferi* in tick populations are becoming less effective due to environmental changes.
- D** the life cycle duration of *Ixodes scapularis* is solely dependent on temperature, with no other environmental factors having a significant impact.

Question 15

Research in social psychology consistently shows that groups tasked with making decisions often focus on information shared among all members, neglecting information known by only one or a few individuals. This phenomenon, sometimes called the *common information effect*, can lead groups to favor suboptimal options, particularly when the most advantageous choice is supported primarily by unshared data. Studies, such as one by Stasser and Titus (1985), demonstrated this bias in laboratory settings where groups failed to identify the best candidate for a position because crucial negative information about less favorable candidates was held uniquely by different members. This suggests that _____

Which choice most logically completes the text?

- A** situations where a group's optimal decision relies heavily on information known to only some members are rare in real-world contexts outside of controlled laboratory settings.
- B** groups are likely to achieve more favorable outcomes if the information relevant to the best choice is widely known among all group members before discussions begin.
- C** when groups successfully identify the most advantageous option despite its primary support coming from unshared information, they have likely overcome the tendency to ignore unique knowledge.
- D** the *common information effect* is less pronounced in groups where members are highly motivated to reach a consensus quickly, regardless of the information available.

Question 16

Niche partitioning, the process by which sympatric species utilize different resources or habitats to avoid direct competition, is a key mechanism for species coexistence. A study by researchers including S. K. Billerman and K. J. Lauri (2021) investigated niche partitioning in two sympatric rodent species, *Peromyscus maniculatus* and *Peromyscus keeni*, in a coastal forest ecosystem. Although both species are omnivorous and consume a variety of seeds, arthropods, and fungi, the study found significant differences in their dietary proportions. *P. maniculatus* consumed a notably higher proportion of arthropods, particularly insects from the order Coleoptera, while *P. keeni*'s diet consisted more heavily of fungal material. This suggests that _____

Which choice most logically completes the text?

- A** *Peromyscus maniculatus* and *Peromyscus keeni* exhibit temporal partitioning by being active at different times of the day or night to avoid direct encounters.
- B** the observed dietary differences between *Peromyscus maniculatus* and *Peromyscus keeni* are solely a result of the varying availability of food resources in their shared habitat.
- C** competition for shared food resources between *Peromyscus maniculatus* and *Peromyscus keeni* is entirely eliminated due to their distinct dietary preferences.
- D** *Peromyscus maniculatus* and *Peromyscus keeni* reduce direct competition, at least in part, through partitioning of food resources, specifically by consuming different proportions of available prey and fungal material.

Question 17

Tardigrades, microscopic invertebrates renowned for their extraordinary ability to withstand extreme environmental conditions, can survive profound dehydration by entering a reversible state of metabolic suspension known as cryptobiosis. A study published in 2021 by K. I. Saito and colleagues investigated the molecular underpinnings of this desiccation tolerance in the species *Ramazzottius varieornatus*. Their research highlighted the critical role of a unique class of intrinsically disordered proteins called Tardigrade Disordered Proteins (TDPs). These proteins were observed to undergo a physical transition into a vitrified, or glass-like solid, state within the cytoplasm of the cells as water is removed. This vitrification effectively immobilizes intracellular molecules and organelles, thereby preventing structural damage and chemical degradation during the desiccated state. This mechanism suggests that _____

Which choice most logically completes the text?

- A** stabilizing the internal cellular environment by restricting the movement of its components is a key strategy *Ramazzottius varieornatus* employs to endure the absence of water.
- B** Tardigrade Disordered Proteins (TDPs) directly repair cellular damage that occurs in *Ramazzottius varieornatus* as a result of severe dehydration.
- C** the vitrified state of Tardigrade Disordered Proteins (TDPs) primarily functions by replacing water molecules within the cytoplasm of *Ramazzottius varieornatus* cells.
- D** all proteins within the cells of *Ramazzottius varieornatus* must transition into a glass-like solid state for the organism to survive desiccation.

Question 18

Research into the fungal pathogen *Ophiocordyceps unilateralis* sensu lato and its carpenter ant hosts (*Camponotus leonardi*) reveals intricate behavioral control. Infected ants deviate from normal foraging trails, exhibiting convulsions before descending from the tree canopy. Terminal infection sees the ant executing a 'summit disease' behavior: biting onto the underside of a leaf or twig, often at specific heights with particular temperature and humidity. The fungus then consumes the ant's body and grows a stroma from its head, releasing conidiospores. This orchestrated exit from the colony before the final death grip, positioning the ant in an exposed, elevated location, suggests that _____

Which choice most logically completes the text?

- A** the fungus enhances its reproductive success by compelling the infected ant to leave the high-density nest environment before releasing its infectious spores.
- B** the fungal pathogen is unable to complete its life cycle within the confines of the *Camponotus leonardi* colony and therefore must exit.
- C** healthy *Camponotus leonardi* ants possess a mechanism to detect and neutralize *Ophiocordyceps unilateralis* spores if they are released inside the nest structure.
- D** the specific temperature and humidity requirements for conidiospore dispersal are never met within the interior of the carpenter ant nest.

Question 19

Maryan Ainsworth, a prominent art historian specializing in Early Netherlandish painting, has conducted extensive technical studies, including infrared reflectography, on works by artists such as Jan van Eyck. Her research has revealed significant details about the *underdrawings*—the initial sketches beneath the paint layers—of these masters. For instance, studies of Jan van Eyck's paintings, including the *Ghent Altarpiece*, have shown that his *underdrawings* are often highly detailed and appear to function as precise guides for the subsequent painting process. This contrasts with the working methods of some other artists of the period whose *underdrawings* are looser and subject to more changes during painting. This suggests that the *underdrawings* in Jan van Eyck's workshop served a purpose different from that of less detailed initial sketches, implying that _____.

Which choice most logically completes the text?

- A** the detailed nature of Jan van Eyck's *underdrawings* indicates that he did not allow for spontaneity in his painting process, preferring to adhere strictly to his initial plans.
- B** technical studies like infrared reflectography are indispensable for accurately attributing Early Netherlandish paintings to specific artists, including those from Jan van Eyck's workshop.
- C** the precise and detailed *underdrawings* characteristic of Jan van Eyck's work were likely created with the intention of being directly followed during the application of paint.
- D** artists in Jan van Eyck's workshop developed a unique approach to *underdrawing* that set them apart from all other painters of the Early Netherlandish period.

Question 20

Research by Volker B. Deecke, John K. B. Ford, and Peter Spong in 2000, and later supported by studies such as those by Andrew D. Foote in 2016, has extensively documented the presence of distinct vocal repertoires, often referred to as dialects, within different pods of killer whales (*Orcinus orca*). These dialects are characterized by unique call types and patterns of call usage. Unlike genetically determined traits, these complex vocalizations are believed to be acquired through social learning, transmitted across generations within a pod. While the precise adaptive functions of these specific dialectal variations remain a subject of ongoing inquiry, their persistence suggests a strong intra-group cohesive role. This suggests that _____

Which choice most logically completes the text?

- A** the variations in vocalizations between different *Orcinus orca* pods are primarily a result of genetic predispositions passed down from parents to offspring.
- B** the continued development of specific vocal patterns within *Orcinus orca* pods is primarily a mechanism for attracting mates from other distinct dialect groups.
- C** the unique vocal patterns observed in each *Orcinus orca* pod likely reinforce the social bonds and collective identity among its members.
- D** the distinct vocal dialects in *Orcinus orca* populations are solely responsible for enabling different pods to hunt the same prey species without competition.

Answers

Question 1

Correct Answer: B

The passage talks about a study on monarch butterflies. The study found that the butterflies are migrating later in the year, but the flowers they need for food are not blooming later. This means the butterflies might arrive when their food is already gone. This problem is called a mismatch in timing.

Choice (A) is wrong because the passage says the butterflies are migrating later, but the flowers are not. This means they are not aligning, but instead are mismatched.

Choice (C) is wrong because the passage talks about climate change impacting both the butterflies' migration timing and the flowers' availability (or lack thereof). It doesn't say only one is impacted.

Choice (D) is wrong because the passage presents the historical data and the current observations as both valid, showing a change over time, not suggesting the historical data was wrong.

Question 2

Correct Answer: A

The passage talks about Ernest Jones's idea that Hamlet's problems come from secret, hidden feelings he doesn't even know he has, specifically wanting his mother and being jealous of his uncle for reasons he's not aware of. This secret feeling stops him from doing what he knows he should do (like getting revenge). This means that what Hamlet does on the outside (his behavior) is caused by his hidden inside feelings. This is what answer choice A says.

Answer choice B is wrong because the passage focuses on Hamlet's personal, inside feelings, not big, general ideas about revenge or family jobs.

Answer choice C is wrong because the passage says Hamlet's problems come from inside him, not from the politics or rules of the kingdom.

Answer choice D is wrong because while the passage talks about one way to understand Hamlet (the psychoanalytic way), it doesn't say if this way can explain everything about him or not.

Question 3

Correct Answer: B

The passage talks about prospect theory, which says people decide things based on a starting point. Things better than the start are seen as good (gains), and things worse are seen as bad (losses). The passage also says people feel worse about losing something than they feel good about gaining the same thing. This makes people not want to risk losing but willing to risk if it means avoiding a loss. This means how you describe the choice (as a gain or a loss compared to where someone starts) changes if they want to take a risk.

(A) is wrong because the passage says people look at things compared to a starting point, not just the size of the gain or loss by itself.

(C) is wrong because the passage describes how people actually make decisions, which can be different from perfectly rational choices.

(D) is wrong because the passage says the starting point (reference point) is very important in how people feel about risks.

Question 4

Correct Answer: C

The passage talks about how people use the first number they see as a starting point when making decisions, even if the number doesn't make sense. This is called the anchoring effect. The passage gives an example of a study where people were influenced by a random number (parts of their social security number) when deciding how much money to pay for

something. People with bigger random numbers offered more money.

This shows that even a number that has nothing to do with the price can become a starting point in people's minds and change how much they think something is worth.

(A) is wrong because the passage and study show the opposite: the anchoring effect is strong and not easily overcome.

(B) is wrong because the passage says people "adjust" away from the anchor, meaning other things also play a role, not just the anchor.

(D) is wrong because Dan Ariely's study supports and builds upon the ideas of Kahneman and Tversky; it doesn't contradict them.

Question 5

Correct Answer: B

The passage talks about how plants called *Nicotiana attenuata* release special smells called volatile organic compounds when caterpillars eat them. It says that nearby plants that smell these compounds get ready to defend themselves better if caterpillars try to eat them later. This getting-ready part is called priming. So, smelling the compounds makes the nearby plants prepared for a future attack.

Choice (A) is wrong because the passage says the plants are "primed," which means they are *prepared* to defend themselves, not that they immediately start their full defense without being attacked.

Choice (C) is wrong because the passage focuses on how the smelling plants react, not on how the caterpillars react to the smell.

Choice (D) is wrong because the passage explicitly states that the increased defensive compounds are an indication of a "primed" state, which is a state of being prepared for a future attack, not just a direct reaction to the smell itself.

Question 6

Correct Answer: C

The passage talks about how John Livingston Lowes thought Coleridge's reading turned into his poems. Then it says that newer studies by people like Richard Holmes and Marina Warner also look at Coleridge's feelings and life, like his use of opium, to understand his poem *Kubla Khan*. These newer studies think that Coleridge's feelings and life problems helped shape the poem, especially how it feels like a dream and is broken into pieces. This means that how he felt and what he went through probably mixed with the things he read, and all of that together showed up in his poems.

(A) is wrong because the passage says the newer studies still agree that what Lowes found is important, even if they add new ideas.

(B) is wrong because the passage says opium was a factor, but it doesn't say it was the only or main reason for everything in the poem.

(D) is wrong because the passage links the poem's broken nature to interruptions during writing, not just as a choice he made on purpose.

Question 7

Correct Answer: C

The passage talks about a study on birds called Great Tits living in the city and in quiet places. The study found that city birds sing their songs starting at a higher pitch than birds in quiet places. The city has a lot of low-pitched noise from cars. People thought the birds sing higher to be heard over the noise, like talking louder when it's noisy. This happened even in small areas with different noise levels.

This means that the birds might change how they sing depending on how noisy it is right where they are.

(A) is wrong because the passage talks about pitch (frequency), not how loud the songs are (amplitude) or saving energy.

(B) is wrong because the passage focuses on noise as the reason for the change in song, not the buildings or other physical things in the city, and it talks about the lowest pitch, not the highest pitch.

(D) is wrong because while the higher pitch helps, the passage doesn't say it's the *only* or *primary* way they communicate well in the noise.

Question 8

Correct Answer: C

The passage talks about how Impressionist paintings were first seen as bad because they looked unfinished and messy. For example, people didn't like the visible brushstrokes. But later, art experts like John Rewald and Linda Nochlin said that Impressionism was actually very important and not a mistake. This means that what people first thought were problems, like the visible brushstrokes, were later understood as new and smart ways of making art that broke the old rules.

(A) is wrong because the passage does not say that the initial critics couldn't see the skills. It says they had different ideas about what good art should look like.

(B) is wrong because while standards might change, the passage focuses on *what* changed in the perception of Impressionism, not just that all art standards are subjective. It's too general.

(D) is wrong because the passage does not say that the *Académie des Beaux-Arts* started using Impressionist styles. It only talks about how art historians changed their minds.

Question 9

Correct Answer: A

The passage describes a study where people from East Asian and Western cultures looked at pictures. East Asian people remembered more background stuff and how things were connected, while Western people

remembered more about the main thing in the picture. This shows that their minds pay attention to different things.

(A) is correct because it says that your culture changes what you pay attention to and remember in a picture, whether it's the background or the main thing. This matches what the passage said.

(B) is wrong because the passage does not say Western people are "less capable" of seeing things. It just says they focus on different parts of the picture.

(C) is wrong because the passage clearly states the differences were due to "cross-cultural differences" and "distinct attentional patterns," not just a person's natural ability to see things.

(D) is wrong because the passage does not say the pictures had to be "novel or unfamiliar." It just talks about "animated scenes" in general. We don't know if they were new or common.

Question 10

Correct Answer: C

The passage talks about how the play *Antigone* was first understood in a simple way, like a fight between God's rules and people's rules. But then, new studies by people like Martha Nussbaum and George Steiner showed that the play is actually much more complicated, looking at things like politics, how characters think, and what justice really means. This suggests that the old way of thinking about the play was too simple.

(A) is wrong because the passage says new studies *challenge* the old way of thinking, not that the old theme is "consistently highlighted across all periods." The new studies add more complexity.

(B) is wrong because the passage states the traditional reading *did* focus on the "clash between divine law and human decree." This choice claims earlier interpretations *failed to acknowledge* it, which contradicts the passage.

(D) is wrong because it's too extreme. The passage says new scholarship *challenged* the old view and offered *nuance*, not that it "discredited *all* prior interpretations" of *all* ancient Greek tragedies.

Question 11

Correct Answer: A

The passage talks about how pine trees use sticky resin to fight off bark beetles. Healthy trees make a lot of resin, which can push beetles out. But if many beetles attack at once, they can beat the tree's defense. This means that how well the tree's resin works depends a lot on whether many beetles attack together, not just how strong the tree's defense is by itself.

Choice (A) says the tree's defense works based on many beetles attacking together, not just the tree's own defense strength. This matches what the passage says about mass attacks overcoming healthy tree defenses.

Choice (B) talks about different types of trees and beetles. The passage mentions *Pinus* and *Dendroctonus frontalis* but focuses on the mass attack strategy, not differences between all types of trees and beetles.

Choice (C) mentions stressed trees being weaker, which is true, but the passage highlights how even healthy trees can be beaten by many beetles attacking at once.

Choice (D) talks about fungi that help beetles. The passage doesn't mention this, so we can't know this from the text.

Question 12

Correct Answer: C

The passage talks about how when a plant called *Campanula rotundifolia* flowers at the same time as a bee called *Megachile campanulae* is busy, they have a good overlap. But when the plant flowers later, the overlap is less. A good overlap means the bee can visit the flower and help it make

seeds. A smaller overlap means the bee might not visit as much. If the bee doesn't visit as much, the plant might not make as many seeds. So, if the plant's flowering time doesn't match the bee's busy time, the plant might have trouble making babies (reproducing). This matches choice (C).

Choice (A) is wrong because the passage only talks about the plant flowering time affecting the overlap, not that the bee's timing is only because of this one plant. Bees visit many flowers.

Choice (B) is wrong because if there is less overlap, the bee is less likely to visit, which would likely mean the plant makes *fewer* seeds, not more.

Choice (D) is wrong because the passage says there was *variation* in the overlap across different places, meaning the plant's flowering isn't perfectly matched everywhere.

Question 13

Correct Answer: D

The passage talks about how past experiences can affect what people think and do, even if they don't remember those experiences. It also mentions a test called the *Implicit Association Test* that tries to measure these hidden thoughts and feelings. Studies using this idea show that hidden biases can lead to unfair treatment, like in schools. This suggests that unfairness in how people are treated might come from thoughts they don't even know they have.

Answer (A) is wrong because the passage doesn't say self-report tests are completely useless, just that they might not catch everything, especially hidden biases.

Answer (B) is wrong because the passage shows that unconscious biases can still affect what people do even if they try to be fair.

Answer (C) is wrong because the passage says people might not be able to report their true attitudes or beliefs, meaning they aren't always aware of why they do things.

Answer (D) is right because it matches the idea that hidden thoughts and feelings, which people don't know about, can cause unfair differences in how people are treated in the world.

Question 14

Correct Answer: A

The passage talks about a study on a tick called *Ixodes scapularis* which spreads a sickness called Lyme disease. The study looked at what helps the tick spread to new places. It says that temperature is really important for the tick to live and be active. Warmer temperatures help the tick grow faster and be active for a longer time. The passage also says the tick is moving more and more towards the north. Since warmer temperatures help the tick and the tick is moving north, we can guess that the warming temperatures in the north are helping the tick spread there. This is what answer A says.

Answer B is wrong because the passage says host animals are one factor, but temperature is "particularly critical," meaning it's extra important, not that hosts are the main reason.

Answer C is wrong because the passage doesn't talk about controlling the sickness or how well control methods work.

Answer D is wrong because the passage says temperature is critical, but it also says other things like host animals and where the ticks live also play a role. So, temperature is not the *only* thing that matters.

Question 15

Correct Answer: C

The passage says that groups often focus on information everyone knows and ignore information only some people know. This makes them pick bad options, especially if the best option needs that special information that only a few people have. The study showed this happening. So, if a group *does* manage to pick the best option, even when that option needs the special

information, it means they must have stopped ignoring that special information. They must have found a way to use the unique knowledge. This is what (C) says.

(A) is wrong because the passage doesn't say if these situations are rare or common in the real world. It only talks about the effect itself.

(B) might seem true based on the passage, but it's not the main inference from the *end* of the passage. The passage highlights what happens when the best choice *is* supported by unshared info, and what that implies if the group still succeeds. (B) talks about a different situation (when info is shared widely).

(D) is wrong because the passage doesn't talk about how motivation to reach a consensus affects the *common information effect*.

Question 16

Correct Answer: D

The passage talks about two types of mice, *Peromyscus maniculatus* and *Peromyscus keeni*, that live in the same area and eat similar things like seeds, bugs, and mushrooms. The study found that even though they eat similar things, *P. maniculatus* eats more bugs, and *P. keeni* eats more mushrooms. This helps them live together without fighting too much over food.

(D) is correct because it says the mice eat different amounts of bugs and mushrooms, which helps them not compete directly for food. This matches what the passage says about their diets and how niche partitioning helps species live together.

(A) is incorrect because the passage only talks about what the mice eat, not when they are awake or active.

(B) is incorrect because the passage says there are differences in their diets, but it doesn't say if these differences are *only* because some foods are more available. There could be other reasons too.

(C) is incorrect because the passage says they eat *similar* things, just in different amounts. This means there is still some overlap and potential for competition, it's just reduced, not entirely gone.

Question 17

Correct Answer: A

The passage talks about tiny animals called tardigrades that can dry out and survive by going into a sleep-like state. A study looked at *Ramazzottius varieornatus*, a type of tardigrade. The study found special proteins called Tardigrade Disordered Proteins (TDPs). When water is gone, these TDPs turn into a solid, glass-like state inside the cells. This glass state stops things inside the cell from moving around. Stopping the movement prevents damage when the cell is very dry.

The correct answer (A) says that keeping the inside of the cell stable by stopping things from moving is a way the tardigrade survives when there is no water. This matches what the passage says about the TDPs turning into a glass state that immobilizes things and prevents damage.

(B) is wrong because the passage says the TDPs *prevent* damage by stopping movement, not that they *repair* damage that has already happened.

(C) is wrong because the passage says the TDPs turn into glass when water is *removed*, not that they replace water.

(D) is wrong because the passage only talks about TDPs turning into glass, not *all* proteins in the cell.

Question 18

Correct Answer: A

The passage describes how the fungus makes infected ants leave their colony and bite onto a leaf or twig in an exposed spot before the fungus releases spores. This means the fungus ensures the ant is outside the crowded ant home when it spreads its seeds (spores). Putting the ant in an

exposed spot away from others helps the fungus spread its spores more easily to find new ants and stops the spores from just infecting ants in the same home. This helps the fungus make more copies of itself (reproductive success) by using the ant's body away from the main group.

(B) says the fungus cannot finish its life cycle inside the home, but the passage doesn't say this is impossible, just that the ant leaves before it dies and releases spores.

(C) says healthy ants can fight the fungus spores inside the home, but the passage doesn't talk about how healthy ants behave or if they have defenses.

(D) says the weather conditions needed for spreading spores are never inside the ant home. The passage says the spot is good for the fungus, but it doesn't say these conditions are *never* found inside the home, which is too strong of a claim.

Question 19

Correct Answer: C

The passage talks about Maryan Ainsworth studying old paintings from the Netherlands made by artists like Jan van Eyck. She looked at the hidden pictures drawn before the paint was put on, called underdrawings. She found that Jan van Eyck's underdrawings were very detailed, like a careful plan for painting. Other artists had looser underdrawings that they changed more while painting. This means Jan van Eyck's careful underdrawings were probably meant to be followed closely when painting.

(A) is wrong because while his drawings were detailed, the passage doesn't say he never allowed for changes or that he strictly followed the plan.

(B) is wrong because the passage talks about using technical studies to learn about underdrawings, not that these studies are the only way to know who painted what.

(D) is wrong because the passage compares Jan van Eyck to "some other artists," not all other artists in that time period, and doesn't say his method

was completely unique.

(C) is correct because the passage says his underdrawings were detailed and seemed to be precise guides for painting, suggesting they were meant to be followed closely.

Question 20

Correct Answer: C

The passage talks about killer whales (*Orcinus orca*) having different ways of talking, called dialects. These ways of talking are learned from each other, not passed down through genes like eye color. The passage says that even though we don't know exactly *why* they have these different ways of talking, they keep doing it, which means it probably helps the group stick together.

(C) is the best answer because it says that these unique ways of talking likely help the group feel like they belong together and strengthen their friendships. This matches the idea that the dialects have a "strong intra-group cohesive role."

(A) is wrong because the passage clearly states these vocalizations are learned through "social learning," not from genes.

(B) is wrong because the passage mentions the dialects help groups *within* the group, not help them find mates from *other* groups. It's about sticking together internally.

(D) is wrong because the passage says the *purpose* of these dialects is still being studied, so we don't know if they help with hunting or stop fighting over food. It also says they are "solely responsible," which is too strong of a claim.