Command of Evidence: Support/Weaken Questions

Module 1 Homework

Now put it all together. Here are twenty questions at Module 1 level, with all five shapes mixed and nothing to tell you which is which, in about the proportions you'll meet on the test. Each one is built on an official question, so its skeleton will look familiar when you meet the original. Work each one through the three steps: pin down the claim and name its shape, predict the evidence, then match and eliminate. To keep pace with the real test — about 71 seconds a question — give yourself 24 minutes.

Question 1

When a public library in Leeds recently reshuffled its shelves, staff noticed loans rising, and many patrons said they were leaving with books they hadn't come in for. Information scientist Teodora Varga and her colleagues have since documented the same effect at several other libraries, and they think they know why. A patron looking for a familiar section that has moved must hunt for it, Varga explains, and the hunt carries the patron past shelves that he or she would normally never see; some of those books end up going home, too.

Which response from a survey of patrons leaving one of the libraries would best support Varga's explanation?

A) "I spent twenty minutes looking for the poetry section after it moved, then finally gave up and went home with nothing at all to read."

B) "A friend told me about a new mystery series last week, so I came in today to borrow the first two books."

C) "I come in every Tuesday afternoon because my son's chess club meets in the library's basement."

D) "I'm leaving with two local history books I never meant to borrow; I passed them while hunting for the atlases, which had moved upstairs."

Question 2

In one river system in the northeastern United States, a viral disease has sharply reduced the population of river otters over the past twenty years. The river's freshwater mussels, which filter large volumes of water and help keep the river clear, have declined as well. Crayfish are the chief predators of young mussels in the river, and crayfish, in turn, are a favorite food of river otters, which seldom eat mussels themselves. Researchers hypothesize that the loss of otters caused the loss of mussels.

Which finding, if true, would most directly support the researchers' hypothesis?

A) As otters have become scarcer in the river system, crayfish have become more plentiful there.

B) The virus that struck the river's otters is closely related to one that has caused similar otter declines in parts of Europe.

C) In stretches where researchers removed most of the crayfish, young mussels survived no better than in stretches where crayfish were left alone.

D) Mussel numbers in the river had already fallen by half before the virus first appeared among the otters.

Question 3

Morwen Pryce (1921–2004) grew up in a coal-mining valley in South Wales, and the miners and their families appear again and again in her vases, bowls, and plates. Trained as a potter, she also made prints and small bronzes, and museums on three continents now own her pieces. A student writing about Pryce for a course on modern art argues that her greatest strength was her ability to bring together artistic traditions from far-apart parts of the world within a single piece.

Which quotation from a scholar describing Pryce's work would best support the student's claim?

A) "Pryce mixed slag from the valley's ironworks into her glazes, giving her bowls the same dark sheen as the slag heaps above her village."

B) "Critics have ranked Pryce's sculpture *Lamp Room, Morning* among the finest British ceramics of the 1960s, and it still draws crowds whenever it is shown."

C) "Pryce's vase *Pithead at Dusk* takes its rounded shape from Korean moon jars, but its surface is painted in the interlocking star patterns of Moroccan tilework."

D) "Pryce's plates from the 1950s portray the valley's chapel choirs, each singer painted from life in a single sitting."

Question 4

Each night for a month, entomologists Lucía Ferraro and Daniel Abara ran two traps at opposite ends of a meadow, both broadcasting the same recorded cricket chirps and one also releasing cricket scent. The flies they were after deposit larvae that feed on male field crickets, which the flies locate by homing in on the males' mating chirps. Many other parasitic insects follow a host's smell, but Ferraro and Abara concluded that this fly gets no help from scent beyond what the chirps already tell it.

Which finding from the experiment, if true, would most directly support Ferraro and Abara's conclusion?

A) When the scent was switched off partway through the experiment, catches at that trap dropped to the level of the other trap.

B) Flies arriving at the trap that gave off scent landed after less searching than flies arriving at the chirps-only trap.

C) Over the course of the experiment, the two traps caught almost exactly the same number of flies.

D) The trap that gave off scent caught more flies on nights when a breeze carried the scent across the meadow.

Question 5

Every spring since 1974, residents of Marlow Bay have been able to borrow vegetable seeds from a seed exchange run by the city, returning seeds saved from their own harvests in the fall, when the exchange's volunteers sort and label them. Within a decade, more than two thousand households were taking part. A student researching the program's origins claims that the city council modeled it on an older one: the Linden Seed Circle, a seed-sharing group founded in the town of Halbrook during the 1930s.

Which quotation from a work by a historian would be the most effective evidence for the student to include in support of this claim?

A) "The Linden Seed Circle was started by a group of schoolteachers who at first shared seeds only among the families of their own pupils."

B) "Unlike the Linden Seed Circle, which charged its members a small yearly fee, Marlow Bay's seed exchange has always been free to every resident."

C) "Marlow Bay's seed exchange grew directly out of a gardening club that a group of local retirees had run every spring in a church hall since the 1950s."

D) "A 1973 council report proposing the seed exchange described the Linden Seed Circle at length and adopted its central goal: helping struggling families grow their own food."

Question 6

Volunteers in entomologist Hana Morikawa's study were given five minutes to find clay caterpillars set on grass stems; half of the models were plain green, and half were green with white stripes running from head to tail. Bold stripes like these are common on caterpillars that birds avoid eating, and biologists have usually read them as a warning that the caterpillar tastes bad. Morikawa suspected the opposite: that by breaking up a caterpillar's outline among thin blades of grass, the stripes make it harder to see.

Which finding, if true, would most directly support Morikawa's idea?

A) Volunteers missed roughly four of every five striped models but only one of every five plain green ones.

B) Striped models were usually the first ones that volunteers spotted, often within a few seconds of starting.

C) Volunteers who had grown up in cities found about as many models as volunteers who had grown up on farms.

D) Several volunteers said afterward that the clay models looked larger and shinier than any real caterpillar they had seen.

Question 7

When a small press reissued a twentieth-century composer's hour-long piano suite as a book of its own, the volume included something earlier readers had never seen: a detailed introduction by the composer explaining how each movement should be played and what had inspired it. The suite itself had first appeared several years earlier, with no commentary at all, in installments in a music magazine. A student studying the suite argues that the introduction was added mainly to boost sales of the reissue.

Which statement, if true, would most directly support the student's argument?

A) The book printed the whole suite in larger, easier-to-read print than the magazine had used, with wider spaces between the separate lines of music.

B) The press's director asked the composer for an introduction after booksellers warned that the music alone would not sell.

C) Piano teachers today often assign the composer's introduction to students who are learning the suite for the first time.

D) The composer wrote the introduction during a summer she spent teaching at a music school in the Swiss Alps.

Question 8

About 3,000 years ago, potters on the island of Kessa began coating their storage jars and cooking pots with a shiny green glaze, a technique that mainland potters in two separate regions, the northern coast and the eastern river valleys, had invented centuries before. Bronze pins, shell beads, carved combs, and other goods made on the northern coast turn up often at Kessa's ancient settlements and harbors, but nothing from the eastern valleys has ever been found there. The islanders, then, most likely learned to glaze from potters on the northern coast.

Which finding, if true, would most directly weaken the underlined claim?

A) Green-glazed pots are among the objects most often found in the island's ancient graves, usually placed near the head.

B) Glazed pottery is still made in the eastern valleys today, but it is no longer made on the northern coast.

C) The chemical makeup of Kessa's earliest glaze matches that of glazes from the eastern valleys, not the northern coast.

D) Workshops on the northern coast turned out far more glazed pottery than workshops in the eastern valleys did.

Question 9

Ecologists Marisa Toledo and Kwame Asare propose that the streetlamps and lit walking paths now common in city parks may be lowering songbirds' nesting success, though only indirectly. Over the past few decades, such lighting has spread into many parks that were once fully dark after sunset. Across forty parks, Toledo and Asare recorded the amount of artificial light at night, the number of flying insects, and the number of insect species. Their survey ended before the nesting season began, however, so it could not test directly whether nests in brighter parks fare worse than nests in darker ones.

Which finding, if true, would most directly support Toledo and Asare's proposal?

A) The brightest parks were mostly in city centers, and songbirds in those parks began singing earlier in the morning than songbirds elsewhere.

B) In the parks studied, brighter nights meant fewer flying insects and fewer insect species, and songbird chicks are known to survive better where insects are plentiful and varied.

C) Songbird chicks are known to need large numbers of insects to survive, yet the brightest parks had just as many flying insects, of just as many species, as the darkest ones.

D) Songbird chicks fledge more often when flying insects are plentiful, and insect numbers in the parks peaked in early summer.

Question 10

Visitors to the Lakeshore Science Museum can use a free app to respond to exhibits in one of two ways: tapping a star or typing a short response. A star costs a visitor about a second; a written response forces the visitor to decide what, exactly, the exhibit made him or her think. Museum researchers Amara Lindqvist and Joel Ferrand suspect that this extra work is what makes an exhibit stick, and they hypothesize that writing about an exhibit leaves a stronger memory of it than starring it does.

Which finding, if true, would most directly support the researchers' hypothesis?

A) Most visitors who downloaded the app used it for less than ten minutes in all, usually near the start of their visit to the museum.

B) A week later, visitors who had typed a response to an exhibit remembered it far more often than visitors who had only starred it.

C) Visitors who typed responses to exhibits spent more time in the museum overall than visitors who only tapped stars did.

D) Visitors who typed responses to exhibits could recall, a week later, only about half of the exhibits they had responded to.

Question 11

Einar Brekkestad (1911–1986) grew up in a fishing village in northern Norway and became one of the first sound recordists at the national broadcaster NRK after it was founded in 1933. For four decades he traveled the country with a portable disc recorder and, later, a tape machine, often sleeping in boats and barns along the way. A student writing a history paper argues that Brekkestad's recordings are an unusually rich record of Norwegian life in his time, because he recorded people from every walk of life, not only professional performers.

Which finding, if true, would most directly support the student's argument?

A) Of the roughly 2,000 people heard in Brekkestad's recordings, fewer than one in ten were paid performers; most were farmers, fishermen, and traders.

B) Sound engineers have long admired Brekkestad's recordings for their clear voices and unusually low background noise, even when he worked outdoors.

C) A collection of Brekkestad's recordings won a top prize at an international radio fair held in Paris in 1952, beating entries from eleven other countries.

D) Several other Scandinavian recordists of the 1930s also traveled to remote fishing villages to record traditional songs and tales.

Question 12

A cattle ranch in Namibia fills its main water trough with a diesel pump, a job that takes about two hours. Diesel is expensive to truck out to the ranch, which lies far from the nearest town, so engineer Kofi Mensah-Bright is testing a fuel-free replacement: an electric pump that runs on solar panels. Powered by six panels, the electric pump could lift water from the same deep well, but it needed three hours to fill the trough. Mensah-Bright expects that wiring more panels to the pump would shorten that time.

Which finding, if true, would most directly support Mensah-Bright's expectation?

A) Cattle drank from the trough just as readily after the electric pump filled it as after the diesel pump did.

B) Dust had to be brushed off the panels every few days to keep the electric pump running at full strength.

C) Powered by ten panels, the electric pump filled the trough in about two and a quarter hours.

D) Over a full year, running the electric pump cost the ranch far less than running the diesel pump did.

Question 13

Maren Ashby is both a glaciologist and a poet. She has spent three decades measuring glaciers in Greenland and Iceland, and her four collections of poems, the most recent published last year, have won several prizes; reviewers often point out that her vocabulary borrows heavily from the language of geology. In an essay for a literature course, a student argues that Ashby writes poetry the way she does science: she brings the methods of field research into the making of her poems.

Which quotation from a literary critic best supports the student's claim?

A) "Ashby wrote her first poems as a teenager, years before she took her first science course and long before she ever set foot on a glacier."

B) "Ashby's research articles are admired for their lyrical descriptions of ice and snow, written with a poet's ear for rhythm and image."

C) "Several of Ashby's poems are spoken by a glacier itself, which describes the scientists who come each summer to measure its retreat."

D) "For her poems about a retreating glacier, Ashby spent a season on the ice logging measurements in a field notebook, then turned those notes into verse."

Question 14

Were the animals of an ancient caravan city in Central Asia kept in town or out on the range? Archaeologists Dilnoza Rakhimova and Owen Pratley think the answer depended on the animal. Plant remains trapped in the dental calculus (hardened plaque) of horses and donkeys buried in the city tell two different stories: barley from the city's irrigated fields dominated the horses' calculus, while the donkeys' held mostly bits of wild desert shrubs. Horses, the team concluded, were probably kept in stables inside the city, while donkeys were sent out to graze beyond its fields.

Which finding, if true, would most strongly support the team's conclusion?

A) Alfalfa, which the city's farmers grew only to cut as hay, turned up in nearly every horse's calculus but in no donkey's.

B) Donkeys buried in the city's later layers had eaten slightly more barley than the donkeys buried in its earliest layers had.

C) Donkeys generally live several years longer than horses do, even when the two animals are kept in very similar conditions.

D) Both animals' diets changed noticeably in years when drought reduced the harvests in the fields around the city.

Question 15

In 1972, Helga Marstrand became the first woman to lead the Northgate Philharmonic, a regional orchestra in northern England, serving as its principal conductor until 1990. She arrived after fifteen years with smaller orchestras in Scandinavia, where she had a reputation for long, demanding rehearsals, and she later described those years in two books about orchestral life. A music historian argues that Marstrand probably set out, as principal conductor, to win a larger place for music by women composers in the orchestra's concerts.

Which finding, if true, would most strongly support the music historian's argument?

A) Marstrand was the first principal conductor at Northgate to open some of the orchestra's rehearsals to local music students and their teachers.

B) Critics praised the orchestra's playing more highly under Marstrand than under the conductor who had led it for the decade before her.

C) Works by women composers made up a far larger share of the orchestra's programs in Marstrand's first five seasons than in the five before.

D) Marstrand's two books about orchestral life were later used as texts in a university course on women in music.

Question 16

Botanist Sofía Arriaga and her team recently pieced together detailed range maps for more than 1,200 tree species from five continents and sorted the species by how their seeds travel. The comparison was meant to check a long-standing idea about seeds and spread. Since the wind can carry the papery-winged seed of a maple or an ash far beyond the parent tree, botanists have expected species with winged seeds to spread across larger areas than species whose heavier, wingless seeds mostly fall nearby.

Which finding, if true, would most directly challenge the underlined expectation?

A) On average, tree species with heavy, wingless seeds occupy larger geographic ranges than species with winged seeds do.

B) Tree species with winged seeds usually begin flowering several weeks earlier in the spring than trees whose seeds lack wings.

C) Tree species with winged seeds tend to grow taller than species whose seeds lack wings.

D) Tree species whose seeds lack wings tend to have larger, heavier leaves than species with winged seeds.

Question 17

Czech industrial designer Tomáš Lisák (1921–1993), who trained as an electrician before studying design, is best known for lamps whose brightly colored electrical cords are coiled neatly around their bases, turning a part that most designers hid into the lamps' main decoration. His lamps sold widely across Europe in the 1960s, and several now belong to design museums. A design student writing about Lisák argues that his decorative cords grew out of something he saw as a boy in a relative's workshop.

Which quotation from a work by a historian would be the most effective evidence for the student to include in support of this claim?

A) "Lisák's lamps were sold in more than forty combinations of cord color and shade color, more than any rival designer offered."

B) "By the late 1960s, a number of Italian designers had begun leaving electrical cords visible in their own lamps."

C) "Lisák's uncle, an electrician, let him help wire village houses as a boy, work that Lisák later said had made him unafraid of any electrical job."

D) "As a boy, Lisák spent afternoons in his uncle's electrical workshop, where brightly colored wire hung in neat coils along the walls, sorted by color."

Question 18

Cheetahs are the fastest land animals, but their prey seldom run in a straight line. Biomechanist Rui Calado argues that a cheetah's long tail helps it catch gazelles and other prey that dodge sharply during a chase: by swinging its tail, a running cheetah may keep its balance through sudden turns. A team of engineers put the idea to the test with a dog-sized, four-legged running robot, sending it repeatedly through the same obstacle course, sometimes with a weighted tail attached and sometimes without.

Which finding from the robot tests, if true, would most strongly support Calado's argument?

A) The robot made noticeably more noise while running with the tail attached than while running without it.

B) With the tail attached, the robot swerved around posts with little loss of speed; without it, the robot slowed sharply before each swerve.

C) After a fall, the robot took noticeably longer to stand back up when the tail was attached than when it was not attached.

D) On the course's long straight stretch, the robot's top speed was slightly lower with the tail attached than without it.

Question 19

Two recent exhibitions at a maritime museum in New England, *Long Voyage* and *Shore Lines*, looked at whaling communities of the 1800s, when the industry was at its height. *Long Voyage* followed sailors on journeys that often lasted three or four years; *Shore Lines* focused on the families who waited for them at home. A museum curator claims that, between them, the two exhibitions showcase the wide range of materials and art forms that people have used to depict life in whaling communities.

Which statement, if true, would most directly support the curator's claim?

A) More than ninety artists contributed works to the two exhibitions, many of them descendants of the region's whaling families.

B) The exhibitions included whale hunts carved on whale teeth, oil paintings of harbor towns, quilts embroidered with family scenes, and painted ship models.

C) Most of the works in the two exhibitions were borrowed from private collectors rather than from other museums in the region.

D) Both exhibitions returned again and again to the theme of the long separations between sailors at sea and their families waiting at home.

Question 20

In the 1980s, horticulturists developed a variety of an ornamental shrub that stays in bloom from early spring to late fall; wild plants of the same species flower for only a few weeks. The long-blooming variety quickly became a favorite of home gardeners. Birds carry its seeds out of suburban gardens, however, and it now grows wild along forest edges and roadsides across western Oregon. A student writing an ecology paper argues that the shrub could do lasting harm to the plant communities it has invaded.

Which quotation from a researcher would best support the student's argument?

A) "Shrubs growing wild along forest edges are, on average, somewhat shorter than the same variety planted in gardens."

B) "No one yet knows how long the shrub can survive in the wild without the care that gardeners give it."

C) "The shrub's flowers range in color from white to deep pink, depending on the soil in which the plant is growing."

D) "Because the shrub stays in bloom for months, it may draw pollinating bees away from native wildflowers, which could then produce fewer seeds."