## **GMAT**

**Reasoning Test 12**

## **No. 2-1 to No. 2-3**

## No. 2-1

### SECTION A

Extended debate concerning the exact point of origin of individual folktales told by Afro-American slaves has unfortunately taken precedence over analysis of the tales’ meaning and function. Cultural continuities with Africa were not dependent on importation and perpetuation of specific folktales in their pristine form. It is in the place that tales occupied in the lives of the slaves and in the meaning slaves derived from them that the clearest resemblances to African tradition can be found. Afro-American slaves did not borrow tales indiscriminately from the Whites among whom they lived. Black people were most influenced by those Euro-American tales whose functional meaning and aesthetic appeal had the greatest similarity to the tales with deep roots in their ancestral homeland. Regardless of where slave tales came from, the essential point is that, with respect to language, delivery, details of characterization, and plot, slaves quickly made them their own.

17. The author claims that most studies of folktales told by Afro-American slaves are inadequate because the studies

(A) fail to recognize any possible Euro-American influence on the folktales

(B) do not pay enough attention to the features of a folktale that best reveal an African influence

(C) overestimate the number of folktales brought from Africa by the slaves

(D) do not consider the fact that a folktale can be changed as it is retold many times（B）

(E) oversimplify the diverse and complex traditions of the slaves ancestral homeland

18. The author’s main purpose is to

(A) create a new field of study

(B) discredit an existing field of study

(C) change the focus of a field of study

(D) transplant scholarly techniques from one field of study to another（C）

(E) restrict the scope of a burgeoning new field of study

19. The passage suggests that the author would regard which of the following areas of inquiry as most likely to reveal the slaves’ cultural continuities with Africa?

(A) The means by which Blacks disseminated their folktales in nineteenth-century America

(B) Specific regional differences in the styles of delivery used by the slaves in telling folktales

(C) The functional meaning of Black folktales in the lives of White children raised by slave

(D) The specific way the slaves used folktales to impart moral teaching to their children（D）

(E) The complexities of plot that appear most frequently in the slaves’ tales

20. Which of the following techniques is used by the author in developing the argument in the passage?

(A) Giving a cliché a new meaning

(B) Pointedly refusing to define key terms

(C) Alternately presenting generalities and concrete details

(D) Concluding the passage with a restatement of the first point made in the passage（E）

(E) Juxtaposing statements of what is not the case and statements of what is the case

The energy contained in rock within the earth’s crust represents a nearly unlimited energy source, but until recently commercial retrieval has been limited to underground hot water and/or steam recovery systems. These systems have been developed in areas of recent volcanic activity, where high rates of heat flow cause visible eruption of water in the form of (in the form of: 以...的形式) geysers and hot springs. In other areas, however, hot rock also exists near the surface but there is insufficient water present to produce eruptive phenomena. Thus a potential hot dry rock (HDR) reservoir exists whenever the amount of spontaneously produced geothermal fluid has been judged inadequate for existing commercial systems.

As a result of recent energy crisis, new concepts for creating HDR recovery systems—which involve drilling holes and connecting them to artificial reservoirs placed deep within the crust—are being developed. In all attempts to retrieve energy from HDR’s, artificial stimulation will be required to create either sufficient permeability or bounded flow paths to facilitate the removal of heat by circulation of a fluid over the surface of the rock.

The HDR resource base is generally defined to included crustal rock that is hotter than 150℃, is at depths less than ten kilometers, and can be drilled with presently available equipment. Although wells deeper than ten kilometers are technically feasible, prevailing economic factors will obviously determine the commercial feasibility of wells at such depths. Rock temperatures as low as 100℃ may be useful for space heating (heating of spaces especially for human comfort by any means (as fuel, electricity, or solar radiation) with the heater either within the space or external to it); however, for producing electricity, temperatures greater than 200℃ are desirable.

The geothermal gradient, which specifically determines the depth of drilling required to reach a desired temperature, is a major factor in the recoverability of geothermal resources. Temperature gradient maps generated from oil and gas well temperature-depth records kept by the American Association of Petroleum Geologists suggest that tappable high-temperature gradients are distributed all across the United States. (There are many areas, however, for which no temperature gradient records exist.)

Indications are that the HDR resource base is very large. If an average geothermal temperature gradient of 22℃ per kilometer of depth is used, a staggering 13,000,000 quadrillion B.T.U.’s of total energy are calculated to be contained in crustal rock to a ten-kilometer depth in the United States. If we conservatively estimate that only about 0.2 percent is recoverable, we find a total of all the coal remaining in the United States. The remaining problem is to balance the economics of deeper, hotter, more costly wells and shallower, cooler, less expensive wells against the value of the final product, electricity and/or heat.

21. The primary purpose of the passage is to

(A) alert readers to the existence of HDR’s as an available energy source

(B) document the challengers that have been surmounted in the effort to recover energy from HDR’s

(C) warn the users of coal and oil that HDR’s are not an economically feasible alternative

(D) encourage the use of new techniques for the recovery of energy from underground hot water and steam（A）

(E) urge consumers to demand quicker development of HDR resources for the production of energy

22. The passage would be most likely to appear in a

(A) petrological research report focused on the history of temperature-depth records in the United States

(B) congressional report urging the conservation of oil and natural gas reserves in the United States

(C) technical journal article concerned with the recoverability of newly identified energy sources

(D) consumer report describing the extent and accessibility of remaining coal resources（C）

(E) pamphlet designed to introduce homeowners to the advantages of HDR space-heating systems

23. According the passage, an average geothermal gradient of 22℃ per kilometer of depth can be used to

(A) balance the economics of HDR energy retrieval against that of underground hot water or steam recovery systems

(B) determine the amount of energy that will used for space heating in the United States

(C) provide comparisons between hot water and HDR energy sources in United States

(D) revise the estimates on the extent of remaining coal resources in the United States（E）

(E) estimate the total HDR resource base in the United States

24. It can be inferred from the passage that the availability of temperature-depth records for any specific area in the United States depends primarily on the

(A) possibility that HDR’s may be found in that area

(B) existence of previous attempts to obtain oil or gas in that area

(C) history of successful hot water or steam recovery efforts in that area

(D) failure of inhabitants to conserve oil gas reserves in that area（B）

(E) use of coal as a substitute for oil or gas in that area

25. According to the passage, in all HDR recovery systems fluid will be necessary in order to allow

(A) sufficient permeability

(B) artificial stimulation

(C) drilling of holes

(D) construction of reservoirs（E）

(E) transfer of heat

26. According to the passage, if the average geothermal gradient in an area is 22℃ per kilometer of depth, which of the following can be reliably predicted?

I. The temperature at the base of a 10-kilometer well will be sufficient for the production of electricity.

II. Drilling of wells deeper than 10 kilometers will be economically feasible.

III. Insufficient water is present to produce eruptive phenomena.

(A) I only

(B) II only

(C) I and II only

(D) II and III only（A）

(E) I, II, and III

27. Which of the following would be the most appropriate title for the passage?

(A) Energy from Water Sources: The Feasibility of Commercial Systems

(B) Geothermal Energy Retrieval: Volcanic Activity and Hot Dry Rocks

(C) Energy Underground: Geothermal Sources Give Way to Fossil Fuels

(D) Tappable Energy for America’s Future: Hot Dry Rocks（D）

(E) High Geothermal Gradients in the United States: Myth or Reality?

### SECTION B

Four legal approaches may be followed in attempting to channel technological development in socially useful direction: specific directives, market incentive modifications, criminal prohibitions, and changes in decision-making structures. Specific directives involve the government’s identifying one or more factors controlling research, development, or implementation of a given technology. Directives affecting such factors may vary from administrative regulation of private activity to government ownership of a technological operation. Market incentive modifications are deliberate alterations of the market within which private decisions regarding the development and implementation of technology are made. Such modifications may consist of imposing taxes to cover the costs to society of a given technology, granting subsidies to pay for social benefits of a technology, creating the right to sue to prevent certain technological development, or easing procedural rules to enable the recovery of damages to compensate for harm caused by destructive technological activity. Criminal prohibitions may modify technological activity in areas impinging on fundamental social values, or they may modify human behavior likely to result from technological applications—for example, the deactivation of automotive pollution control devices in order to improve vehicle performance. Alteration of decision-making structures includes all possible modifications in the authority, constitution, or responsibility of private and public entities deciding questions of technological development and implementation. Such alterations include the addition of public-interest members to corporate boards, the imposition by statute of duties on governmental decision-makers, and the extension of warranties in response to consumer action.

Effective use of these methods to control technology depends on whether or not the goal of regulation is the optimal allocation of resources. When the object is optimal resource allocation, that combination of legal methods should be used that most nearly yields the allocation that would exist if there were no external costs resulting from allocating resources through market activity. There are external costs when the price set by buyers and sellers of goods fails to include some costs, to anyone, that result from the production and use of the goods. Such costs are internalized when buyers pay them.

Air pollution from motor vehicles imposes external costs on all those exposed to it, in the form of soiling, materials damage, and disease: these externalities result from failure to place a price on air, thus making it a free good, common to all. Such externalities lead to nonoptimal resource allocation, because the private net product and the social net product of market activity are not often identical. If all externalities were internalized, transactions would occur until bargaining could no longer improve the situation, thus giving an optimal allocation of resources at a given time.

17. The passage is primarily concerned with describing

(A) objectives and legal method for directing technological development

(B) technical approaches to the problem of controlling market activity

(C) economic procedures for facilitating transactions between buyers and sellers

(D) reasons for slowing the technological development in light of environmentalist objections（A）

(E) technological innovations making it possible to achieve optimum allocation of resources

18. The author cites air pollution from motor vehicles in lines 54-56 in order to

(A) revise cost estimates calculated by including the costs of resources

(B) evaluate legal methods used to prevent technological developments

(C) give examples of costs not included in buyer-seller bargains

(D) refute hypotheses not made on the basis of monetary exchange values（C）

(E) commend technological research undertaken for the common welfare

19. According to the passage, transactions between private buyers and sellers have effects on society that generally

(A) are harmful when all factors are considered

(B) give rise to ever-increasing resource costs

(C) reflect an optimal allocation of natural resources

(D) encompass more than the effects on the buyers and sellers alone（D）

(E) are guided by legal controls on the development of technology

20. It can be inferred from the passage that the author does NOT favor which of the following?

(A) Protecting the environment for future use

(B) Changing the balance of power between opposing interests in business

(C) Intervening in the activity of the free market

(D) Making prices reflect costs to everyone in society（E）

(E) Causing technological development to cease

21. A gasoline-conservation tax on the purchase of large automobiles, with the proceeds of the tax rebated to purchasers of small automobiles, is an example of

(A) a specific directive

(B) a market incentive modification

(C) an optimal resource allocation

(D) an alteration of a decision-making structure（B）

(E) an external cost

22. If there were no external costs, as they are described in the passage, which of the following would be true?

(A) All technology-control methods would be effective.

(B) Some resource allocations would be illegal.

(C) Prices would include all costs to members of society.

(D) Some decision-making structures would be altered.（C）

(E) The availability of common goods would increase.

23. The author assumes that, in determining what would be an optimal allocation of resources, it would be possible to

(A) assign monetary value to all damage resulting from the use of technology

(B) combine legal methods to yield the theoretical optimum

(C) convince buyers to bear the burden of damage from technological developments

(D) predict the costs of new technological developments（A）

(E) derive an equation making costs depend on prices

24. On the basis of the passage, it can be inferred that the author would agree with which of the following statements concerning technological development?

(A) The government should own technological operations.

(B) The effect of technological development cannot be controlled.

(C) Some technological developments are beneficial.

(D) The current state of technological development results in a good allocation of resources.（C）

(E) Applications of technological developments are criminally destructive.

The whole biosphere, like the individual organisms that live inside it, exists in a chemically dynamic state (dynamic state: 动态). In this homeostatic system, a great number of organic compounds are synthesized, transformed, and decomposed continuously; together, these processes constitute the major parts of the carbon cycle. For the smooth operation of this cycle, degradation is just as important as synthesis: the green plants produce great quantities of polymers, such as cellulose, and innumerable other compounds like alkaloids, terpenes, and flavonoids, that green plants cannot use as sources of energy during respiration. The release of the carbon in these compounds for recycling depends almost entirely on the action of both aerobic and anaerobic bacteria and certain types of fungi. Some bacteria and fungi possess the unique and extremely important biochemical asset of being able to catalyze the oxidation of numerous inert products, thereby initiating reaction sequences that produce carbon dioxide and so return much carbon to a form that actively enters into life cycles once again.

25. The passage contains information that would answer which of the following questions about the carbon cycle?

I. What are some of the compounds that are broken down in the carbon cycle?

II. Why are some compounds that are involved in the carbon cycle less reactive than others?

III. What role do bacteria and fungi play in the carbon cycle?

(A) I only

(B) II only

(C) III only

(D) I and II only（E）

(E) I and III only

26. The author implies that which of the following is the primary reason that degradation is as important as synthesis to the smooth operation of the carbon cycle?

(A) Most of the polymers and organic compounds found in the plant kingdom are chemically unstable.

(B) The synthesis of some organic material deprives life processes of an energy source.

(C) Decomposition permits the recycling of carbon that would otherwise be fixed in certain substances.

(D) Many organisms cannot use plants as a source of food, but can feed on bacteria and fungi.（C）

(E) Bacteria and fungi could not survive if some carbon compounds were not degraded.

27. The author’s contention about the importance of bacteria and fungi in the production of energy for life processes would be most clearly strengthened if which of the following were found to be true?

(A) Both aerobes and anaerobes provide sources of energy through the decomposition of organic material.

(B) Most compounds containing carbon are unavailable as energy sources except to some bacteria and fungi.

(C) Bacteria and fungi break down inert material in ways that do not involve oxidation.

(D) Many compounds remain inert, even in the presence of bacteria and fungi.（B）

(E) Bacteria and fungi assist in the synthesis of many organic compounds.

## No. 2-2

### SECTION A

Even as the number of females processed through juvenile courts climbs steadily, an implicit consensus remains among scholars in criminal justice that male adolescents define the delinquency problem in the United States. We suggest two reasons why this view persists. First, female adolescents are accused primarily of victimless crimes, such as truancy, that do not involve clear-cut damage to persons or property. If committed by adults, these actions are not even considered prosecutable; if committed by juvenile males, they have traditionally been looked on leniently by the courts. Thus, ironically, the plight of female delinquents receives little scrutiny because they are accused of committing relatively minor offenses. Second, the courts have long justified so-called preventive intervention into the lives of young females viewed as antisocial with the rationale that women are especially vulnerable. Traditional stereotypes of women as the weaker and more dependent sex have led to earlier intervention and longer periods of misdirected supervision for female delinquents than for males.

17. Which of the following statements best expresses the irony pointed out by the authors in lines 13-16 of the passage?

(A) Female delinquents tend to commit victimless crimes more frequently than their male counterparts.

(B) The predicament of male delinquents receives more attention than that of females because males are accused of more serious crimes.

(C) Adults are frequently punished less severely than adolescents for committing more serious crimes.

(D) The juvenile justice system cannot correct its biases because it does not even recognize them.（B）

(E) Although the number of female delinquents is steadily increasing, the crimes of which they are accused are not particularly serious.

18. It can be inferred from the passage that the authors believe traditional stereotypes of women to be

(A) frequently challenged

(B) persistently inexplicable

(C) potentially harmful

(D) rapidly changing（C）

(E) habitually disregarded

19. The passage suggests that scholars in criminal justice could be criticized for which of the following?

(A) Underestimating the seriousness of juvenile crime

(B) Rationalizing the distinction made between juveniles and adults in the legal system

(C) Concerning themselves too little with the prevention of juvenile delinquency

(D) Focusing on those whose crimes have involved damage to persons or property（D）

(E) Failing to point out injustices in the correctional system

Scattered around the globe are more than one hundred regions of volcanic activity known as hot spots (hot spot: a place in the upper mantle of the earth at which hot magma from the lower mantle upwells to melt through the crust usually in the interior of a tectonic plate to form a volcanic feature; *also*: a place in the crust overlying a hot spot). Unlike most volcanoes, hot spots are rarely found along the boundaries of the continental and oceanic plates that comprise the Earth’s crust; most hot spots lie deep in the interior of plates and are anchored deep in the layers of the Earth’s surface. Hot spots are also distinguished from other volcanoes by their lavas, which contain greater amounts of alkali metals than do those from volcanoes at plate margins.

In some cases, plates moving past hot spots have left trails of extinct volcanoes in much the same way that wind passing over a chimney carries off puffs of smoke. It appears that the Hawaiian Islands were created in such a manner by a single source of lava, welling up from a hot spot, over which the Pacific Ocean plate passed on a course roughly from the east toward the northwest, carrying off a line of volcanoes of increasing age. Two other Pacific island chains—the Austral Ridge and the Tuamotu Ridge—parallel the configuration of the Hawaiian chain; they are also aligned from the east toward the northwest, with the most recent volcanic activity near their eastern terminuses.

That the Pacific plate and the other plates are moving is now beyond dispute; the relative motion of the plates has been reconstructed in detail. However, the relative motion of the plates with respect to the Earth’s interior cannot be determined easily. Hot spots provide the measuring instruments for resolving the question of whether two continental plates are moving in opposite directions or whether one is stationary and the other is drifting away from it. The most compelling evidence that a continental plate is stationary is that, at some hot spots, lavas of several ages are superposed instead of being spread out in chronological sequence. Of course, reconstruction of plate motion from the tracks of hot-spot volcanoes assumes that hot spots are immobile, or nearly so. Several studies support such an assumption, including one that has shown that prominent hot spots throughout the world seem not to have moved during the past ten million years.

Beyond acting as frames of reference, hot spots apparently influence the geophysical processes that propel the plates across the globe. When a continental plate comes to rest over a hot spot, material welling up from deeper layers forms a broad dome that, as it grows, develops deep fissures. In some instances, the continental plate may rupture entirely along some of the fissures so that the hot spot initiates the formation of a new ocean. Thus, just as earlier theories have explained the mobility of the continental plates, so hot-spot activity may suggest a theory to explain their mutability.

20. The primary purpose of the passage is to

(A) describe the way in which hot spots influence the extinction of volcanoes

(B) describe and explain the formation of the oceans and continents

(C) explain how to estimate the age of lava flows from extinct volcanoes

(D) describe hot spots and explain how they appear to influence and record the motion of plates（D）

(E) describe the formation and orientation of island chains in the Pacific Ocean

21. According to the passage, hot spots differ from most volcanoes in that hot spots

(A) can only be found near islands

(B) are active whereas all other volcanoes are extinct

(C) are situated closer to the earth’s surface

(D) can be found along the edges of the plates（E）

(E) have greater amounts of alkali metals in their lavas

22. It can be inferred from the passage that evidence for the apparent course of the Pacific plate has been provided by the

(A) contours of the continents

(B) dimensions of ocean hot spots

(C) concurrent movement of two hot spots

(D) pattern of fissures in the ocean floor（E）

(E) configurations of several mid-ocean island chains

23. It can be inferred from the passage that the spreading out of lavas of different ages at hot spots indicates that a

(A) hot spot is active

(B) continental plate has moved

(C) continental rupture is imminent

(D) hot spot had been moving very rapidly（B）

(E) volcano contains large concentrations of alkali metals

24. The passage suggests which of the following about the Hawaiian Islands, the Austral Ridge, and the Tuamotu Ridge?

(A) The three chains of islands are moving eastward.

(B) All the islands in the three chains have stopped moving.

(C) The three island chains are a result of the same plate movement.

(D) The Hawaiian Islands are receding from the other two island chains at a relatively rapid rate.（C）

(E) The Austral Ridge and the Tuamotu Ridge chains have moved closer together whereas the Hawaiian Islands have remained stationary.

25. Which of the following, if true, would best support the author’s statement that hot-spot activity may explain the mutability of continental plates?

(A) Hot spots move more rapidly than the continental and oceanic plates.

(B) Hot spots are reliable indicators of the age of continental plates.

(C) Hot spots are regions of volcanic activity found only in the interiors of the continental plates.

(D) The alignment of hot spots in the Pacific Ocean parallels the alignment of Pacific Ocean islands.（E）

(E) The coastlines of Africa and South America suggest that they may once have constituted a single continent that ruptured along a line of hot spots.

26. The author’s argument that hot spots can be used to reconstruct the movement of continental plates is weakened by the fact that

(A) hot spots are never found at the boundaries of plates

(B) only extinct volcanoes remain after a plate moves over a hot spot

(C) lava flow patterns for all hot spots have not been shown to be the same

(D) the immobility or near immobility of hot spots has not been conclusively proven（D）

(E) the changing configurations of islands make pinpointing the locations of hot spots difficult

27. The author’s style can best be described as

(A) dramatic

(B) archaic

(C) esoteric

(D) objective（D）

(E) humanistic

### SECTION B

Although scientists observe that an organism’s behavior falls into rhythmic patterns, they disagree about how these patterns are affected when the organism is transported to a new environment. One experimenter, Brown, brought oysters from Connecticut waters to Illinois waters. She noted that the oysters initially opened their shells widest when it was high tide in Connecticut, but that after fourteen days their rhythms had adapted to the tide schedule in Illinois. Although she could not posit an unequivocal causal relationship between behavior and environmental change, Brown concluded that a change in tide schedule is one of several possible exogenous influences (those outside the organism) on the oysters’ rhythms. Another experimenter, Hamner, however, discovered that hamsters from California maintain their original rhythms even at the South Pole. He concluded that endogenous influences (those inside the organism) seem to affect an organism’s rhythmic behavior.

17. All of the following could be considered examples of exogenous influences on an organism EXCEPT the influence of the

(A) level of a hormone on a field mouse’s readiness for mating

(B) temperature of a region on a bear’s hibernation

(C) salt level of a river on a fish’s migration

(D) humidity of an area on a cat’s shedding of its fur（A）

(E) proximity of an owl on a lizard’s searching for food

18. Which of the following statements best describes the conclusion drawn by Brown (lines 14-17)

(A) A change in tide schedule is the primary influence on an oyster’s rhythms.

(B) A change in tide schedule may be an important exogenous influence on an oyster’s rhythms.

(C) Exogenous influences, such as a change in tide schedule, seldom affect an oyster’s rhythms.

(D) Endogenous influences have no effect on an oyster’s rhythms.（B）

(E) Endogenous influences are the only influences on an oyster’s rhythms.

19. The passage suggests that Brown’s study was similar to Hamner’s in which of the following ways?

I. Both experimenters discovered that a new environment had a significant effect on an organism’s behavior rhythms.

II. Both experimenters observed an organism’s behavioral rhythms after the organism had been transported to a new environment.

III. Both experimenters knew an organism’s rhythmic patterns in its original environment.

(A) I only

(B) II only

(C) I and II only

(D) II and III only（D）

(E) I, II, and III

20. Which of the following, if true, would most weaken Brown’s conclusion?

(A) The oyster gradually closed their shells after high tide in Illinois had passed.

(B) The oysters’ behavioral rhythms maintained their adaptation to the tide schedule in Illinois throughout thirty days of observation.

(C) Sixteen days after they were moved to Illinois, the oysters opened their shells widest when it was high tide in Connecticut.

(D) A scientist who brought Maryland oysters to Maine found that the oysters opened their shells widest when it was high tide in Maine.（C）

(E) In an experiment similar to Brown’s, a scientist was able to establish a clear causal relationship between environmental change and behavioral rhythms.

Picture-taking is a technique both for annexing the objective world and for expressing the singular self. Photographs depict objective realities that already exist, though only the camera can disclose them. And they depict an individual photographer’s temperament, discovering itself through the camera’s cropping of reality. That is, photography has two antithetical ideals: in the first, photography is about the world and the photographer is a mere observe who counts for little; but in the second, photography is the instrument of intrepid, questing subjectivity and the photographer is all.

These conflicting ideals arise from a fundamental uneasiness on the part of both photographers and viewers of photographs toward the aggressive component in “taking” a picture. Accordingly, the ideal of a photographer as observer is attractive because it implicitly denies that picture-taking is an aggressive act. The issue, of course, is not so clear-cut. What photographers do cannot be characterized as simply predatory or as simply, and essentially, benevolent. As a consequence, one ideal of picture-taking or the other is always being rediscovered and championed.

An important result of the coexistence of these two ideals is a recurrent ambivalence toward photography’s means. Whatever the claims that photography might make to be a form of personal expression on a par (on a par: adv.同等) with painting, its originality is inextricably linked to the powers of a machine. The steady growth of these powers has made possible the extraordinary informativeness and imaginative formal beauty of many photographs, like Harold Edgerton’s high-speed photographs of a bullet hitting its target or of the swirls and eddies of a tennis stroke. But as cameras become more sophisticated, more automated, some photographers are tempted to disarm themselves or to suggest that they are not really armed, preferring to submit themselves to the limits imposed by premodern camera technology because a cruder, less high-powered machine is thought to give more interesting or emotive results, to leave more room for creative accident. For example, it has been virtually a point of honor for many photographers, including Walker Evans and Cartier-Bresson, to refuse to use modern equipment. These photographers have come to doubt the value of the camera as an instrument of “fast seeing.” Cartier-Bresson, in fact, claims that the modern camera may see too fast.

This ambivalence toward photographic means determines trends in taste. The cult of the future (of faster and faster seeing) alternates over time (over time: 随着时间的过去) with the wish to return to a purer past—when images had a handmade quality. This nostalgia for some pristine state of the photographic enterprise is currently widespread and underlies the present-day enthusiasm for daguerreotypes and the wok of forgotten nineteenth-century provincial photographers. Photographers and viewers of photographs, it seems, need periodically to resist their own knowingness.

21. According to the passage, interest among photographers in each of photography’s two ideals can be described as

(A) rapidly changing

(B) cyclically recurring

(C) steadily growing

(D) unimportant to the viewers of photographs（B）

(E) unrelated to changes in technology

22. The author is primarily concerned with

(A) establishing new technical standards for contemporary photography

(B) analyzing the influence of photographic ideals on picture-taking

(C) tracing the development of camera technology in the twentieth century

(D) describing how photographers’ individual temperaments are reflected in their work（B）

(E) explaining how the technical limitations imposed by certain photographers on themselves affect their work

23. The passage states all of the following about photographs EXCEPT:

(A) They can display a cropped reality.

(B) The can convey information.

(C) They can depict the photographer’s temperament.

(D) They can possess great formal beauty.（E）

(E) They can change the viewer’s sensibilities.

24. The author mentions the work of Harold Edgerton in order to provide an example of

(A) how a controlled ambivalence toward photography’s means can produce outstanding pictures

(B) how the content of photographs has changed from the nineteenth century to the twentieth

(C) the popularity of high-speed photography in the twentieth century

(D) the relationship between photographic originality and technology（D）

(E) the primacy of formal beauty over emotional content

25. The passage suggests that photographers such as Walker Evans prefer old-fashioned techniques and equipment because these photographers

(A) admire instruments of fast seeing

(B) need to feel armed by technology

(C) strive for intense formal beauty in their photographs

(D) like the discipline that comes from self-imposed limitations（E）

(E) dislike the dependence of photographic effectiveness on the powers of a machine

26. According to the passage, the two antithetical ideals of photography differ primarily in the

(A) value that each places on the beauty of the finished product

(B) emphasis that each places on the emotional impact of the finished product

(C) degree of technical knowledge that each requires of the photographer

(D) extent of the power that each requires of the photographer’s equipment（E）

(E) way in which each defines the role of the photographer

27. Which of the following statements would be most likely to begin the paragraph immediately following the passage?

(A) Photographers, as a result of their heightened awareness of time, are constantly trying to capture events and actions that are fleeting.

(B) Thus the cult of the future, the worship of machines and speed, is firmly established in spite of efforts to the contrary by some photographers.

(C) The rejection of technical knowledge, however, can never be complete and photography cannot for any length of time pretend that it has no weapons.

(D) The point of honor involved in rejecting complex equipment is, however, of no significance to the viewer of a photograph.（C）

(E) Consequently the impulse to return to the past through images that suggest a handwrought quality is nothing more that a passing fad.

## No. 2-3

### SECTION A

It is well known that biological changes at the molecular level have morphogenetic consequences, consequences affecting the formation and differentiation of tissues and organs. It is superfluous to point out (point out: v.指出) that gene mutations and disturbances of the bio-synthetic processes in the embryo may result in abnormalities in the morphology (structure) of an organism. However, whereas much is known about causes and consequences at the molecular level, and in spite of an enormous accumulation of chemical and morphological data on embryos of various kinds, our understanding of how genes control morphogenesis is still far from complete. Perhaps one reason for this is that molecular biologists and morphologists speak different languages. Whereas the former speak about messenger-RNA and conformational changes of protein molecules, the latter speak of ectoderms, hypoblasts, and neural crests.

One solution to this predicament is to try to find some phenomena relevant to morphogenesis which both the molecular biologist and the morphologist can understand and discuss. As morphogenesis must be basically the result of changes in behavior of the individual cells, it seems logical to ask morphologists to describe the morphogenetic events observed in terms of changes in cellular contact, changes in the rate of proliferation of cells, or similar phenomena. Once this is done, it may be appropriate to ask questions about the molecular background for these changes. One may, for instance, ask whether variations in cell contact reflect alterations in the populations of molecules at the cell surface, or one may inquire about the molecular basis for the increased cell mobility involved in cell dispersion.

Studies of this kind have been carried out with cells released from tissues in various ways and then allowed to reveal their behavior after being spread out into a thin layer. In many cases, such cells show the ability to reaggregate, after which different cell types may sort themselves out into different layers and even take part in still more intricate morphogenetic events. But in most cases, the behavior of cells in the intact embryo is difficult to study because of the thickness and opacity of the cell masses. The sea urchin (sea urchin: 海胆) embryo, however, has the advantage that it is so transparent that each cell can be easily observed throughout development. Thus, by recording the development of a sea urchin embryo with time-lapse photography, the research scientist might discover previously unknown features of cellular behavior. Perhaps the study of the sea urchin in this manner can provide a medium by which the molecular biologist and the morphologist can begin communicating with each other more effectively about the way in which genes control morphogenesis.

17. The author’s primary purpose is to

(A) outline a procedure and discuss possible applications

(B) evaluate an experiment in terms of its applicability to medical research

(C) propose a method for curing specific genetic disorders

(D) explain a problem and suggest a solution for it（D）

(E) reveal the shortcomings of several attitudes toward genetic research

18. The author states that research into the genetic control of morphogenesis has been impeded by

(A) an incomplete understanding of biomolecular reactions that are highly complex

(B) a lack of communication between scientists whose work could be complementary

(C) a reluctance on the part of morphologists to share data with molecular biologists

(D) a lack of research in the area of morphology（B）

(E) the unavailability of suitable research equipment

19. The major objective of the author’s proposal is to

(A) devise a technique for proving that abnormalities in morphology result from gene mutations

(B) improve the procedures for organizing chemical and morphological data

(C) increase the accuracy of measurements of cell populations and cell mobility

(D) reduce the margin of error in the study of conformational changes of protein molecules（E）

(E) provide a plan for increasing knowledge about the influence of genes on morphogenesis

20. It can be inferred from the passage that some cells that have been isolated from an organism have the ability to

(A) control morphogenesis

(B) reform to make higher organisms

(C) reorganize to form clusters of cells

(D) regulate the transmission of light through the cell wall（C）

(E) regulate the rate of tissue formation

21. It can be inferred from the passage that the study of the effects of genes on morphogenesis is best accomplished by observing

(A) intact developing embryos

(B) adult sea urchins

(C) isolated living cells

(D) groups of genetically mutated cells（A）

(E) cells from the same kink of tissue

22. According to the passage, it is difficult to study cells in most intact embryos because

(A) morphogenetic events cannot be isolated

(B) embryos die quickly

(C) embryos are difficult to obtain

(D) individual cells reaggregate too quickly（E）

(E) individual cells are difficult to see

23. Which of the following sequences best describes the author’s suggestion for future research on morphogenesis?

(A) Accumulation of data, simplification of language, explanation of morphogenesis

(B) Dispersion of cells, evaluation of cell activity, development of an explanatory hypothesis

(C) Classification of cell types, separation of cell, observation of cell activity

(D) Observation of cell development, description of cell behavior, explanation at the molecular level（D）

(E) Differentiation of cell types, description of cell structure, analysis of molecular components

24. The tone of the author’s discussion of the difference in the language used by morphologists and that used by molecular biologists is one of

(A) indifference

(B) neutrality

(C) derision

(D) approbation（B）

(E) indignation

The black experience, one might automatically assume, is known to every Black author. Henry James was pondering a similar assumption when he said: “You were to suffer your fate. That was not necessarily to know it.” This disparity between an experience and knowledge of that experience is the longest bridge an artist must cross. Don L. Lee, in his picture of the Black poet, “studying his own poetry and the poetry of other Black poets,” touches on (touch on: 略微谈到) the crucial point. In order to transform his own sufferings—or joys—as a Black person into usable knowledge for his readers, the author must first order his experiences in his mind. Only then can he create feelingly and coherently the combination of fact and meaning that Black audiences require for the reexploration of their lives. A cultural community of Black authors studying one another’s best works systematically would represent a dynamic interchange of the spirit—corrective and instructive and increasingly beautiful in its recorded expression.

25. It can be inferred from the passage that the author considers poetry to be which of the following?

(A) A means of diversion in which suffering is transformed into joy

(B) An art form that sometimes stifles creative energy

(C) A bridge between the mundane and the unreal

(D) A medium for conveying important information（D）

(E) An area where beauty must be sacrificed for accuracy

26. It can be inferred from the passage that the author would be LEAST likely to approve of which of the following?

(A) Courses that promote cultural awareness through the study of contemporary art

(B) The development of creative writing courses that encourage mutual criticism of student work

(C) Growing interest in extemporaneous writing that records experiences as they occur

(D) A shift in interest from abstract philosophical poetry to concrete autobiographical poetry（C）

(E) Workshops and newsletters designed to promote dialogues between poets

27. The author refers to Henry James primarily in order to

(A) support his own perception of the “longest bridge” (lines 6-7)

(B) illustrate a coherent “combination of fact and meaning” (lines 14-15)

(C) provide an example of “dynamic interchange of the spirit” (line 19)

(D) establish the pervasiveness of lack of self-knowledge（A）

(E) contrast James’s ideas about poetry with those of Don L. Lee

### SECTION B

My objective is to analyze certain forms of knowledge, not in terms of repression or law, but in terms of power. But the word power is apt to lead to misunderstandings about the nature, form, and unity of power. By power, I do not mean a group of institutions and mechanisms that ensure the subservience of the citizenry. I do not mean, either, a mode of subjugation that, in contrast to violence, has the form of the rule. Finally, I do not have in mind a general system of domination exerted by one group over another, a system whose effects, through successive derivations, pervade the entire social body. The sovereignty of the state, the form of law, or the overall unity of a domination are only the terminal forms power takes.

It seems to me that power must be understood as the multiplicity of force relations that are immanent in the social sphere; as the process that, through ceaseless struggle and confrontation, transforms, strengthens, or reverses them; as the support that these force relations find in one another, or on the contrary, the disjunctions and contradictions that isolate them from one another; and lastly, as the strategies in which they take effect, whose general design or institutional crystallization is embodied in the state apparatus, in the formulation of the law, in the various social hegemonies.

Thus, the viewpoint that permits one to understand the exercise of power, even in its more “peripheral” effects, and that also makes it possible to use its mechanisms as a structural framework for analyzing the social order, must not be sought in a unique source of sovereignty from which secondary and descendent forms of power emanate but in the moving substrate of force relations that, by virtue of their inequality, constantly engender local and unstable states of power. If power seems omnipresent, it is not because it has the privilege of consolidating everything under its invincible unity, but because it is produced from one moment to the next, at every point, or rather in every relation from one point to another. Power is everywhere, not because it embraces everything, but because it comes from everywhere. And if power at times seems to be permanent, repetitious, inert, and self-reproducing, it is simply because the overall effect that emerges from all these mobilities is a concatenation that rests on each of them and seeks in turn to arrest their movement. One needs to be nominalistc, no doubt: power is not an institution, and not a structure; neither is it a certain strength we are endowed with; it is the name that one attributes to a complex strategic situation in a particular society.

17. The author’s primary purpose in defining power is to

(A) counteract self-serving and confusing uses of the term

(B) establish a compromise among those who have defined the term in different ways

(C) increase comprehension of the term by providing concrete examples

(D) demonstrate how the meaning of the term has evolved（E）

(E) avoid possible misinterpretations resulting from the more common uses of the term

18. According to the passage, which of the following best describes the relationship between law and power?

(A) Law is the protector of power.

(B) Law is the source of power.

(C) Law sets bounds to power.

(D) Law is a product of power.（D）

(E) Law is a stabilizer of power.

19. Which of the following methods is NOT used extensively by the author in describing his own conception of power?

(A) Restatement of central ideas

(B) Provision of concrete examples

(C) Analysis and classification

(D) Comparison and contrast（B）

(E) Statement of cause and effect

20. With which of the following statement would the author be most likely to agree?

(A) Power tends to corrupt; absolute power corrupts absolutely.

(B) The highest proof of virtue is to possess boundless power without abusing it.

(C) To love knowledge is to love power.

(D) It is from the people and their deeds that power springs.（D）

(E) The health of the people as a state is the foundation on which all their power depends.

21. The author’s attitude toward the various kinds of compulsion employed by social institutions is best described as

(A) concerned and sympathetic

(B) scientific and detached

(C) suspicious and cautious

(D) reproachful and disturbed（B）

(E) meditative and wistful

22. According to the passage, states of power are transient because of the

(A) differing natures and directions of the forces that create them

(B) rigid structural framework in which they operate

(C) unique source from which they emanate

(D) pervasive nature and complexity of the mechanisms by which they operate（A）

(E) concatenation that seeks to arrest their movement

23. It can be inferred from the passage that the author believes the conflict among social forces to be

(A) essentially the same from one society to another even though its outward manifestation may seem different

(B) usually the result of misunderstandings that impede social progress

(C) an inevitable feature of the social order of any state

(D) wrongly blamed for disrupting the stability of society（C）

(E) best moderated in states that possess a strong central government

The hypothesis of an expanding Earth has never attracted notable support, and if it were not for the historical example of continental drift, such indifference might be a legitimate response to an apparently improbable concept. It should be remembered, however, that drift too was once regarded as illusory, but the idea was kept alive until evidence from physicists compelled geologists to reinterpret their data.

Of course, it would be as dangerous to overreact to history by concluding that the majority must now be wrong about expansion as it would be to reenact the response that greeted the suggestion that the continents had drifted. The cases are not precisely analogous. There were serious problems with the pre-drift world view that a drift theory could help to resolve, whereas Earth expansion appears to offer no comparable advantages. If, however, physicists could show that the Earth’s gravitational force has decreased with time, expansion would have to be reconsidered and accommodated.

24. The passage indicates that one reason why the expansion hypothesis has attracted little support is that it will not

(A) overcome deficiencies in current geologic hypotheses

(B) clarify theories concerning the Earth’s gravitational forces

(C) complement the theory of continental drift

(D) accommodate relevant theories from the field of physics（A）

(E) withstand criticism from scientists outside the field of geology

25. The final acceptance of a drift theory could best be used to support the argument that

(A) physicists are reluctant to communicate with other scientists

(B) improbable hypotheses usually turn out to be valid

(C) there should be cooperation between different fields of science

(D) there is a need for governmental control of scientific research（C）

(E) scientific theories are often proved by accident

26. In developing his argument, the author warns against

(A) relying on incomplete measurements

(B) introducing irrelevant information

(C) rejecting corroborative evidence

(D) accepting uninformed opinions（E）

(E) making unwarranted comparisons

27. It can be deduced from the passage that the gravitational force at a point on the Earth’s surface is

(A) representative of the geologic age of the Earth

(B) analogous to the movement of land masses

(C) similar to optical phenomena such as mirages

(D) proportional to the size of the Earth（D）

(E) dependent on the speed of the Earth’s rotation

**ANSWERS**

## No. 2-1

### SECTION A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. B | 1. C | 1. D | 1. E | 1. A |
| 1. C | 1. E | 1. B | 1. E | 1. A |
| 1. D |  |  |  |  |

### SECTION B

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. A | 1. C | 1. D | 1. E | 1. B |
| 1. C | 1. A | 1. C | 1. E | 1. C |
| 1. B |  |  |  |  |

## No. 2-2

### SECTION A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. B | 1. C | 1. D | 1. D | 1. E |
| 1. E | 1. B | 1. C | 1. E | 1. D |
| 1. D |  |  |  |  |

### SECTION B

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. A | 1. B | 1. D | 1. C | 1. B |
| 1. B | 1. E | 1. D | 1. E | 1. E |
| 1. C |  |  |  |  |

## No. 2-3

### SECTION A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. D | 1. B | 1. E | 1. C | 1. A |
| 1. E | 1. D | 1. B | 1. D | 1. C |
| 1. A |  |  |  |  |

### SECTION B

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. E | 1. D | 1. B | 1. D | 1. B |
| 1. A | 1. C | 1. A | 1. C | 1. E |
| 1. D |  |  |  |  |