新 **GRE** 阅读理解 **36** 套

**GRE–RC–36**

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提

示

1. 文章篇幅、题目数量、文章与题目难度、文字界面等均有可能与正式考试有差别。使用本材料训练

者请遵循风险自担原则。但同时，编者已经尽可能使本材料符合实际考试情况。

2. 练习 Exercise1-16 有 4-6 篇文章，12-13 道题，与笔试情况相符，可作为基础训练材料。从练习 17

开始，每个练习有 10 道题，涉及 4 篇文章（1 长 3 短或 4 篇皆为短文章）和 1 个逻辑单题的短文章，

与现有的机考光盘情况相符，我们预期这是实际考试的情况，可作为模拟训练材料。 按照现有的光

盘资料，含有长文章的 Section 的阅读量会比全部由短文章组成的 Section 的阅读量多 200-300 字，

这种不对等情况令人感到困惑，请考生留意。）

3. 一个练习的做题时间可控制在 15-17 分钟；如果能够在此时间内完成练习 1-16，则完成练习 17 及以

后的内容自然时间可以保证。按照目前机考光盘的情况，一个语文 Section 会有填空题和阅读题各

10 道。10 道填空题中包含 4 道 6 选 2 的同义词填空题和 6 道正常填空题（5 选 1 填空，以及多空格

填空），10 道阅读题中包含 1 道逻辑单题与 9 道正常阅读题。

4. 实际机考时，2 个语文部分仅会有一个 Section 会有一篇长文章；但为增加训练难度，本材料也许连

续 2 个 Section 都出现长文章，其出现频率比考试时略高。此外，每个 section 预计会有同义词题 1-2

道；在设计时考虑到同义词题较容易，故减少出题率，就此而言，本材料或许会比真实考试题目略

难。另外，按光盘情况，考试时或许出现高亮句子或短语，本练习材料未能在形式上完全反映。以

上或更多可能存在的差别，请考生留意。

5. 建议以 2-4 个练习为单位进行循环训练。首先按照考试要求时间连续做掉 2-4 个练习，然后反复再

做 3-4 遍，这时主要目标不是做对，而是总结文章结构及出题规律，之后再转向新的 2-4 练习，依次

下去。

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**Exercise 1**

**Questions 1 to 3 are based on the following reading passage.**

Immediately relevant to game theory are the sex

ratios in certain parasitic wasp species that have a

large excess of females. In these species, fertilized eggs

*Line* develop into females and unfertilized eggs into males.

1. The author suggests that the work of Fisher and

Hamilton was similar in that both scientists c

(A) conducted their research at approximately

the same time

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A female stores sperm and can determine the sex of

each egg she lays by fertilizing it or leaving it

unfertilized. By Fisher‘s genetic argument that the sex

ratio will be favored which maximizes the number of

descendants an individual will have and hence the

number of gene copies transmitted, it should pay a

female to produce equal numbers of sons and daughters.

Hamilton, noting that the eggs develop within their

host—the larva of another insect—and that the newly

emerged adult wasps mate immediately and disperse,

offered a remarkably cogent analysis. Since only one

female usually lays eggs in a given larva, it would pay

her to produce one male only, because this one male

could fertilize all his sisters on emergence. Like Fisher,

Hamilton looked for an evolutionarily stable strategy,

but he went a step further in *recognizing* that he was

looking for a strategy.

1

(B) sought to manipulate the sex ratios of some

of the animals they studied

(C) sought an explanation of why certain sex

ratios exist and remain stable

(D) studied game theory, thereby providing important

groundwork for the later development of strategy

theory

(E) studied reproduction in the same animal species

**For the following question, consider each of the**

**choices separately and select all that apply**

2. The passage contains information that would

answer which of the following questions about

wasps? B c

A How many eggs does the female wasp

usually lay in a single host larva?

B Can some species of wasp determine sex

ratios among their offspring?

C What is the approximate sex ratio

among the offspring of parasitic wasps?

3. Which of the following is NOT true of the species of

parasitic wasps discussed in the passage? d

(A) Adult female wasps are capable of storing sperm.

(B) Female wasps lay their eggs in the larvae of

other insects.

(C) The adult female wasp can be fertilized by a male that

was hatched in the same larva as herself.

(D) So few male wasps are produced that extinction is

almost certain.

(E) Male wasps do not emerge from their hosts until they

reach sexual maturity.

**Questions 4 to 5 are based on the following reading passage.**

Tocqueville, apparently, was wrong. Jacksonian

America was not a fluid, egalitarian society where

individual wealth and poverty were ephemeral

*Line* conditions. At least to argues E. Pessen in his

4. According to the passage, Pessen indicates that all of

the following were true of the very wealthy in the United

States between 1825 and 1850 EXCEPT:

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iconoclastic study of the very rich in the United States

between 1825 and 1850.

Pessen does present a quantity of examples, together

with some refreshingly intelligible statistics, to establish

the existence of an inordinately wealthy class. Though

active in commerce or the professions, most of the

wealthy were not self-made, but had inherited family

fortunes. In no sense mercurial, these great fortunes

survived the financial panics that destroyed lesser ones.

Indeed, in several cities the wealthiest one percent

constantly increased its share until by 1850 it owned

half of the community‘s wealth. Although these

observations are true, Pessen overestimates their

importance by concluding from them that the undoubted

progress toward inequality in the late eighteenth century

continued in the Jacksonian period and that the United

States was a class-ridden, plutocratic society even

(A) They formed a distinct upper class.

(B) Many of them were able to increase their holdings.

(C)Some of them worked as professionals or in

business.

(D) Most of them accumulated their own fortunes.

(E) Many of them retained their wealth in spite of

financial upheavals.

5. Which of the following best states the author‘s

main point? e

(A) Pessen‘s study has overturned the previously

established view of the social and economic

structure of early nineteenth-century America.

(B) Tocqueville‘s analysis of the United States

in the Jacksonian era remains the definitive

account of this period.

(C) Pessen‘s study is valuable primarily because

before industrialization.

(162 words)

2

it shows the continuity of the social

system in the United States throughout

the nineteenth century.

(D) The social patterns and political power of

the extremely wealthy in the United

States between 1825 and 1850 are well

documented.

(E) Pessen challenges a view of the social and

economic system in the United States

from 1825 to 1850, but he draws

conclusions that are incorrect.

Anaerobic glycolysis is a process in which energy is

produced, without oxygen, through the breakdown of

muscle glycogen into lactic acid and adenosine tri-

*Line* phosphate (ATP), the energy provider. The amount

6. The passage‘s suggestion that the total anaerobic

energy reserves of a vertebrate are proportional to the

vertebrate‘s size is based on which of the following

assumption?

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of energy that can be produced anaerobically is a

function of the amount of glycogen present—in all

vertebrates about 0.5 percent of their muscles‘ wet

weight. Thus the anaerobic energy reserves of a verte-

brate are proportional to the size of the animal. If, for

example, some predators had attacked a 100-ton

dinosaur, normally torpid, the dinosaur would have

been able to generate almost instantaneously, via

anaerobic glycolysis, the energy of 3,000 humans at

maximum oxidative metabolic energy production.

3

(A) larger vertebrates conserve more energy

than smaller vertebrates

(B) larger vertebrates use less oxygen per unit

weight than smaller vertebrates

(C) the ability of a vertebrate to consume food

is a function of its size

(D) the amount of muscle tissue in a vertebrate

is directly related to its size

(E) the size of a vertebrate is proportional to

the quantity of energy it can utilize

Extraordinary creative activity has been characterized

as revolutionary, flying in the face of what is established

and producing not what is acceptable but what will

*Line* become accepted. According to this formulation, highly

study of his compositions reveals that Beethoven

overturned no fundamental rules. Rather, he was an

5*0* incomparable strategist who exploited limits—the

rules, forms, and conventions that he inherited from

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creative activity transcends the limits of an existing form

and establishes a new principle of organization. How-

ever, the idea that extraordinary creativity transcends

established limits in misleading when it is applied to the

arts, even though it may be valid for the sciences.

Difference between highly creative art and highly creative

science arise in part from a difference in their goals. For

the sciences, a new theory is the goal and end result of the

creative act. Innovative science produces new

propositions in terms of which diverse phenomena can be

related to one another in more coherent ways. Such

phenomena as a brilliant diamond or a nesting bird are

relegated to the role of data, serving as the means for

formulating or testing a new theory. The goal of highly

creative art is very different: the phenomenon itself

becomes the direct product of the creative act.

Shakespeare‘s *Hamlet* is not a tract about the behavior of

indecisive princes or the uses of political power; nor is

Picasso‘s painting *Guernica* primarily a propositional

statement about the Spanish Civil War or the evils of

fascism. What highly creative artistic activity produces is

not a new generalization that transcends established limits,

but rather an aesthetic particular. Aesthetic particulars

produced by the highly creative artist extend or

exploit, in an innovative way, the limits of an existing

form, rather than transcend that form.

This is not to deny that a highly creative artist some-

times establishes a new principle of organization in the

history of an artistic field; the composer Monteverdi,

who created music of the highest aesthetic value, comes

to mind. More generally, however, whether or not a

composition establishes a new principle in the history of

music has little bearing on its aesthetic worth. Because

they embody a new principle of organization, some

musical works, such as the operas of the Florentine

Camerata, are of signal historical importance, but few

listeners or musicologists would include these among the

great works of music. On the other hand, Mozart‘s *The*

*Marriage of Figaro* is surely among the masterpieces of

music even though its modest innovations are confined

to extending existing means. It has been said of

Beethoven that he toppled the rules and freed music

from the stifling confines of convention. But a close

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predecessors such as Haydn and Mozart, Handel and

Bach—in strikingly original ways.

(466words)

**For the following question, consider each of the**

**choices separately and select all that apply**

7. The passage supplies information for answering which

of the following questions? A b

(A) Has unusual creative activity been character-

ized as revolutionary?

(B) Did Beethoven work within a musical tradition

that also included Handel and Bach?

(C) Who besides Monteverdi wrote music that the

author would consider to embody new prin-

ciples of organization and to be of high aes-

thetic value?

8. The author regards the idea that all highly creative

artistic activity transcends limits with c

(A) deep skepticism

(B) strong indignation

(C) marked indifference

(D) moderate amusement

(E) sharp derision

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9. The author implies that an innovative scientific

contribution is one that e

(A) is cited with high frequency in the publications

of other scientists

(B) is accepted immediately by the scientific com-

munity

(C) does not relegate particulars to the role of data

(D) presents the discovery of a new scientific fact

(E) introduces a new valid generalization

10. Which of the following statements would most

logically concluded the last paragraph of the

passage? d

(A) Unlike Beethoven, however, even the greatest

of modern composers, such as Stravinsky, did

not transcend existing musical forms.

(B) In similar fashion, existing musical forms were

even further exploited by the next generation

of great European composers.

(C) Thus, many of the great composers displayed

the same combination of talents exhibited by

Monteverdi.

(D) By contrast, the view that creativity in the arts

exploits but does not transcend limits is sup-

ported in the field of literature.

(E) Actually, Beethoven‘s most original works were

largely unappreciated at the time that they

were first performed.

Great comic art is never otherwordly, it does not

seek to mystify us, and it does not deny ambiguity by

branding as evil whatever differs from good. Great

*Line* comic artists assume that truth may bear all lights,

11. Select the sentence in the passage that suggests that

great comic art can be characterized as optimistic about

the ability of humans to act rationally.

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and thus they seek to accentuate contradictions in

social action, not gloss over or transcend them by

appeals to extrasocial symbols of divine ends, cosmic

purpose, or laws of nature. The moment of

transcendence in great comic art is a social moment,

born out of the conviction that we are human, even

though we try to be gods. The comic community to

which artists address themselves is a community of

reasoning, loving, joyful, compassionate beings, who

are willing to assume the human risks of acting

rationally. Without invoking gods or demons, great

comic art arouses courage in reason, courage which

grows out of trust in what humsan beings can do a

12. It can be inferred from the passage that the

author admires great comic artists primarily

for their d

(A) ability to understand the frequently subtle

differences between good and evil

(B) ability to reconcile the contradictions in

human behavior

(C) ability to distinguish between rational and

irrational behavior

(D) insistence on confronting the truth about

the human condition

(E) insistence on condemning human faults and

weaknesses

humans.

13. Which of the following is the most accurate

description of the organization of the passage? c

(A) A sequence of observations leading to a prediction

(B) A list of inferences drawn from facts stated at the

beginning of the passage

(C) A series of assertions related to one general subject

(D) A statement of the major idea, followed by

specific examples

(E) A succession of ideas moving from specific to

general

6

**Exercise 2**

By 1950, the results of attempts to relate brain

processes to mental experience appeared rather

discouraging. Herring suggested that different modes of

*Line* sensation, such as pain, taste, and color, might be

2. The description of an experiment in which electric

stimuli were applied to different sensory fields of the

cerebral cortex tends to support the theory that

(A) the simple presence of different cortical areas

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correlated with the discharge of specific kinds of nervous

energy. However, subsequently developed methods of

recording and analyzing nerve potentials failed to reveal

any such qualitative diversity. Although qualitative

variance among nerve energies was never rigidly

disproved, the doctrine was generally abandoned in favor

of the opposing view, namely, that nerve impulses are

essentially homogeneous in quality and are transmitted as

―common currency‖ throughout the nervous system.

According to this theory, it is not the quality of the

sensory nerve impulses that determines the diverse

conscious sensations they produce, but rather the different

areas of the brain into which they discharge, and there is

some evidence for this view. In one experiment, when an

electric stimulus was applied to a given sensory field of

the cerebral cortex of a conscious human subject, it

produced a sensation of the appropriate modality for that

particular locus, that is, a visual sensation from the visual

cortex, an auditory sensation from the auditory cortex,

and so on. However, cortical locus, in itself, turned out to

have little explanatory value.

1. The author mentions ―common currency‖ in line 13

primarily in order to emphasize the

(A) lack of differentiation among nerve impulses in

human beings

(B) similarity of the sensations that all human

beings experience

(C) similarities in the views of scientists who have

studied the human nervous system

(D) continuous passage of nerve impulses through

the nervous system

(E) recurrent questioning by scientists of an

accepted explanation about the nervous

system

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cannot account for the diversity of mental

experience

(B) variation in spatiotemporal patterning of nerve

impulses correlates with variation in

subjective experience

(C) nerve impulses are essentially homogeneous

and are relatively unaffected as they travel

through the nervous system

(D) the mental experiences produced by sensory

nerve impulses are determined by the

cortical area activated

(E) variation in neuron types affects the quality of

nerve impulses

3. Which of the following best summarizes the

author‘s opinion of the suggestion that different

areas of the brain determine perceptions produced

by sensory nerve impulses?

(A) It is a plausible explanation, but it has not been

completely proved.

(B) It is the best explanation of brain processes

currently available.

(C) It is disproved by the fact that the various areas

of the brain are physiologically very similar.

(D) There is some evidence to support it, but it fails

to explain the diversity of mental experience.

(E) There is experimental evidence that confirms its

correctness.

A Marxist sociologist has argued that racism stems

from the class struggle that is unique to the capitalist

system—that racial prejudice is generated by capitalists

*Line* as a means of controlling workers. His thesis works

4. The passage supplies information that would

answer which of the following questions EXCEPT?

A What conditions caused the discrimination

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relatively well when applied to discrimination against

Blacks in the United States, but his definition of racial

prejudice as ―racially-based negative prejudgments

against a group generally accepted as a race in any

given region of ethnic competition,‖ can be interpreted

as also including hostility toward such ethnic groups as

the Chinese in California and the Jews in medieval

Europe. However, since prejudice against these latter

peoples was not inspired by capitalists, he has to reason

that such antagonisms were not really based on race.

He disposes thusly (albeit unconvincingly) of both the

intolerance faced by Jews before the rise of capitalism

and the early twentieth-century discrimination against

Oriental people in California, which, inconveniently,

was instigated by workers.

8

against Oriental people in California in the

early twentieth century?

B What evidence did the Marxist sociologist

provide to support his thesis?

C What explanation did the Marxist sociologist

give for the existence of racial prejudice?

5. According to the passage, the Marxist sociologist‘s

chain of reasoning required him to assert that

prejudice toward Oriental people in California was

(A) directed primarily against the Chinese

(B) similar in origin to prejudice against the Jews

(C) understood by Oriental people as ethnic

competition

(D) provoked by workers

(E) nonracial in character

It would be wonderful to observe a singularity (an

infinitely dense concentration of matter) and

obtain direct evidence of the undoubtedly bizarre

phenomena that occur near one. Unfortunately, in

most cases a distant observer cannot see the

singularity; outgoing light rays are dragged back by

gravity so forcefully that even if they could start out

within a few kilometers of the singularity, they would end

up in the singularity itself.

9

6. Which of the following sentences would most

probably follow the last sentence of the passage?

(A) Thus, a physicist interested in studying

phenomena near singularities would

necessarily hope to find a singularity

with a measurable gravitational field.

(B) Accordingly, physicists to date have

been unable to observe directly any

singularity.

(C) It is specifically this startling phenomenon

that has allowed us to codify the scant

information currently available about

singularities.

(D) Moreover, the existence of this extra-

ordinary phenomenon is implied in the

extensive reports of several physicists.

(E) Although unanticipated, phenomena such

as these are consistent with the structure

of a singularity.

The evolution of intelligence among early large

mammals of the grasslands was due in great measure to

the interaction between two ecologically synchronized

*Line* groups of these animals, the hunting carnivores and the

Using past events as a framework, the large mammal

predator is working out a relationship between

*50* movement and food, sensitive to possibilities in cold

trails and distant sounds—and yesterday‘s unforgotten

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herbivores that they hunted. The interaction resulting

from the differences between predator and prey led to a

general improvement in brain functions; however, certain

components of intelligence were improved far more than

others.

The kind of intelligence favored by the interplay of

increasingly smarter catchers and increasingly keener

escapers is defined by attention—that aspect of mind

carrying consciousness forward from one moment to the

next. It ranges from a passive, free-floating awareness to

a highly focused, active fixation. The range through these

states is mediated by the arousal system, a network of

tracts converging from sensory systems to integrating

centers in the brain stem. From the more relaxed to the

more vigorous levels, sensitivity to novelty is increased.

The organism is more awake, more vigilant; this

lessons. The herbivore prey is of a different mind. Its

mood of wariness rather than searching and its attitude

of general expectancy instead of anticipating are

*55* silk-thin veils of tranquility over an explosive endocrine

system.

increased vigilance results in the apprehension of ever

more subtle signals as the organism becomes more

sensitive to its surroundings. The processes of arousal and

concentration give attention its direction. Arousal is at

*25* first general, with a flooding of impulses in the brain stem;

then gradually the activation is channeled. Thus begins

concentration, the holding of consistent images. One

meaning of intelligence is the way in which these images

and other alertly searched information are used in the

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context of previous experience. Consciousness links past

attention to the present and permits the integration of

details with perceived ends and purposes.

The elements of intelligence and consciousness come

together marvelously to produce different styles in

predator and prey. Herbivores and carnivores develop

different kinds of attention related to escaping or chasing.

Although in both kinds of animal, arousal stimulates the

production of adrenaline and norepinephrine by the

adrenal glands, the effect in herbivores is primarily fear,

whereas in carnivores the effect is primarily aggression.

For both, arousal attunes the animal to what is ahead.

Perhaps it does not experience forethought as we know it,

but the animal does experience something like it. The

predator is searchingly aggressive, inner-directed, tuned

by the nervous system and the adrenal hormones, but

aware in a sense closer to human consciousness than, say,

a hungry lizard‘s instinctive snap at a passing beetle.

10

7. The author refers to a hungry lizard (line 47)

primarily in order to

(A) demonstrate the similarity between the

hunting methods of mammals and those

of nonmammals

(B) broaden the application of his argument by

including an insectivore as an example

(C) make a distinction between higher and

lower levels of consciousness

(D) provide an additional illustration of the

brutality characteristic of predators

(E) offer an objection to suggestions that all

animals lack consciousness

8. It can be inferred from the passage that in

animals less intelligent than the mammals

discussed in the passage

(A) past experience is less helpful in ensuring survival

(B) attention is more highly focused

(C) muscular coordination is less highly developed

(D) there is less need for competition among species

(E) environment is more important in establishing

the proper ratio of prey to predator

11

9. The author provides information that would

answer which of the following questions?

A Why is an aroused herbivore usually fearful?

B What are some of the degrees of attention in large

mammals?

C What occurs when the stimulus that causes arousal of

a mammal is removed?

10. According to the passage, as the process of

arousal in an organism continues, all of the

following may occur EXCEPT

(A) the production of adrenaline

(B) the production of norepinephrine

(C) a heightening of sensitivity to stimuli

(D) an increase in selectivity with respect to stimuli

(E) an expansion of the range of states mediated

by the brain stem

Gutman‘s examination of the slaves‘ extended kinship

system produces important findings. Gutman discovers

that cousins rarely married, an exogamous tendency that

*Line* contrasted sharply with the endogamy practiced by the

11. According to the passage, all of the following

are true of the West African rules governing

marriage:

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plantation owners. This preference for exogamy, Gutman

suggests, may have derived from West African rules

governing marriage, which, though they differed from

one tribal group to another, all involved some kind of

prohibition against unions with close kin. This taboo

against cousins‘ marrying is important, argues Gutman,

because it is one of many indications of a strong

awareness among slaves of an extended kinship network.

The fact that distantly related kin would care for children

separated from their families also suggests this

awareness. When blood relationships were few, as in

newly created plantations in the Southwest, ―fictive‖

kinship arrangements took their place until a new pattern

of consanguinity developed. Gutman presents convincing

evidence that this extended kinship structure—which he

believes developed by the mid-to-late eighteenth

century—provided the foundations for the strong

communal consciousness that existed among slaves.

12

A The rules forbade marriages between

close kin.

B The rules were not uniform in all respects

from one West African tribe to another.

C The rules have been considered to be a

possible source of slaves‘ marriage

preferences.

12. Which of the following statements concerning

the marriage practices of plantation owners

during the period of Black slavery in the United

States can most logically be inferred from the

information in the passage.

(A) These practices began to alter sometime

around the mid-eighteenth century.

(B) These practices varied markedly from one

region of the country to another.

(C) Plantation owners usually based their

choice of marriage partners on economic

considerations.

(D) Plantation owners often married earlier

than slaves.

(E) Plantation owners often married their

cousins.

13. Select the sentence in the passage that the author

introduces additional support for the existence of the

awareness of kinship among the slaves of an extended

kinship network.

**Exercise 3**

The dark regions in the starry night sky are not

pockets in the universe that are devoid of stars as

had long been thought. Rather, they are dark because

*Line* of interstellar dust that hides the stars behind it.

1. According to the passage, which of the following

is a direct perceptual consequence of interstellar

dust EXCEPT?

*5*

*10*

Although its visual effect is so pronounced, dust is

only a minor constituent of the material, extremely

low in density, that lies between the stars. The average

density of interstellar material in the vicinity of our Sun is

1,000 to 10,000 times less than the best terrestrial

laboratory vacuum. It is only because of the enormous

interstellar distances that so little material per unit of

volume becomes so significant. Optical astronomy

is most directly affected, for although interstellar gas

is perfectly transparent, the dust is not. (125 words)

13

A Some stars are rendered invisible to observers on

Earth.

B Many visible stars are made to seem brighter than

they really are.

C The dust is conspicuously visible against a

background of bright stars.

2. It can be inferred from the passage that it is

because space is so vast that

(A) little of the interstellar material in it seems substantial

(B) normal units of volume seem futile for measurements

of density

(C) stars can be far enough from Earth to be obscured

even by very sparsely distributed matter

(D) interstellar gases can, for all practical purposes, be

regarded as transparent

(E) optical astronomy would be of little use even if no

interstellar dust existed

In Hardy‘s novels, various impulses were sacrificed to

each other inevitably and often. Inevitably, because Hardy

did not care in the way that novelists such as

*Line* Flaubert or James cared, and therefore took paths of least

4. The passage supplies information to suggest that

its author would be most likely to agree with

which of the following statements about the

novelists Flaubert and James?

*5*

*10*

*15*

resistance. Thus, one impulse often surrendered to a

fresher one and, unfortunately, instead of exacting a

compromise, simply disappeared. A desire to throw over

reality a light that never was might give way abruptly to

the desire on the part of what we might consider a

novelist-scientist to record exactly and concretely the

structure and texture of a flower. In this instance, the new

impulse was at least an energetic one, and thus its

indulgence did not result in a relaxed style. But on other

occasions Hardy abandoned a perilous, risky, and highly

energizing impulse in favor of what was for him the

fatally relaxing impulse to classify and schematize

abstractly. When a relaxing impulse was indulged, the

style—that sure index of an author‘s literary worth—was

certain to become verbose. (167 words)

3. Which of the following words could best be

substituted for ―relaxed‖ (line 13) without

substantially changing the author‘s meaning?

(A) informal

(B) confined

(C) risky

(D) wordy

(E) metaphoric

14

(A) They indulged more impulses in their

novels than did Hardy in his novels.

(B) They have elicited a greater degree of

favorable response from most literary

critics than has Hardy.

(C) In the writing of their novels, they often

took pains to effect a compromise among

their various novelistic impulses.

(D) Regarding novelistic construction, they

cared more about the opinions of other

novelists than about the opinions of

ordinary readers.

(E) They wrote novels in which the impulse

toward realism and the impulse away

from realism were evident in equal

measure.

5. Which of the following statements best describes

the organization of the passage (―Thus…abstractly‖)?

(A) The author makes a disapproving

observation and then presents two cases,

one of which leads to a qualification of

his disapproval and the other of which

does not.

(B) The author draws a conclusion from a

previous statement, explains his

conclusion in detail, and then gives a

series of examples that have the effect of

resolving an inconsistency.

(C) The author concedes a point and then

makes a counterargument, using an

extended comparison and contrast that

qualifies his original concession.

(D) The author makes a judgment, points out

an exception to his judgment, and then

contradicts his original assertion.

(E) The author summarizes and explains an

argument and then advances a brief

history of opposing arguments.

A mysterious phenomenon is the ability of over-water

migrants to travel on course. Birds, bees, and other

species can keep track of time without any sensory cues

*Line* from the outside world, and such ―biological clocks‖

7. It can be inferred from the passage that if the

flock of birds described in lines 8-9 were

navigating by compass sense alone, they would, after

the storm, fly

*5*

clearly contribute to their ―compass sense.‖ For example,

(A) east

(B) north

(C) northwest

they can use the position of the Sun or stars, along with

the time of day, to find north. But compass sense alone

(D) south

(E) southeast

cannot explain how birds navigate the ocean: after a flock

traveling east is blown far south by a storm, it will

8. Of the following descriptions of migrating

animals, which most strongly suggests that the

*10*

*15*

assume the proper northeasterly course to compensate.

Perhaps, some scientists thought, migrants determine

their geographic position on Earth by celestial navigation,

almost as human navigators use stars and planets, but this

would demand of the animals a fantastic map sense.

Researchers now know that some species have a magnetic

sense, which might allow migrants to determine their

geographic location by detecting variations in the strength

animals are depending on magnetic cues to orient

themselves?

(A) Pigeons can properly readjust their course

even when flying long distances through

exceedingly dense fogs.

(B) Bison are able to reach their destination by

passing through a landscape that has

been partially altered by a recent fire.

of the Earth‘s magnetic field.

(157 words)

(C) Elephants are able to find grounds that

some members of the herd have never seen

before.

6. The main idea of the passage is that

(A) migration over land requires a simpler

explanation than migration over water

does

(B) the means by which animals migrate over

water are complex and only partly

understood

(C) the ability of migrant animals to keep track

of time is related to their magnetic sense

(D) knowledge of geographic location is

essential to migrants with little or no

compass sense

(E) explanations of how animals migrate tend to

replace, rather than build on, one

another

15

(D) Swallows are able to return to a given spot

at the same time every year.

(E) Monarch butterflies coming from different

parts of North America are able to arrive

at the same location each winter.

Starting from the premise that mythology and legend

preserve at least a nucleus of historical fact, Bachofen

argued that women were dominant in many ancient

*Line* societies. His work was based on a comprehensive survey

9. The primary purpose of the passage is to

(A) compare competing new approaches to

understanding the role of women in ancient

societies

*5*

*10*

*15*

*20*

of references in the ancient sources to Amazonian and

other societies with matrilineal customs—societies in

which descent and property rights are traced through the

female line. Some support for his theory can be found in

evidence such as that drawn from Herodotus, the Greek

―historian‖ of the fifth century B. C. Nonetheless, this

assumption that the first recorders of ancient myths have

preserved facts is problematic. Ancient Greek

descriptions of those societies were meant not so much to

represent observed historical fact—real Amazonian

societies—but rather to offer ―moral lessons‖ on the

supposed outcome of women‘s rule in their own society.

The Amazons were often characterized, for example, as

the equivalents of giants and centaurs, enemies to be slain

by Greek heroes; thus, their customs were presented not

as those of a respectable society, but as the very antitheses

of ordinary Greek practices.

(179 words)

16

(B) investigate the ramifications of Bachofen‘s

theory about the dominance of women in

ancient societies

(C) explain the burgeoning interest among

historians in determining the actual status of

women in various societies

(D) analyze the nature of Amazonian society

and uncover similarities between it and the

Greek world

(E) criticize the value of ancient myths in

determining the status of women in ancient

societies

10. Select the sentence in the passage that is presented

as evidence supporting the author‘s view of the

ancient Greeks‘ descriptions of the Amazons.

11. The author‘s attitude toward Bachofen‘s treatise is

best described as one of

(A) qualified approval

(B) profound ambivalence

(C) studied neutrality

(D) pointed disagreement

(E) unmitigated hostility

Visual recognition involves storing and retrieving

memories. Neural activity, triggered by the eye, forms an

image in the brain‘s memory system that constitutes an

*Line* internal representation of the viewed object. When an

12. The author is primarily concerned with

(A) explaining how the brain receives images

(B) synthesizing hypotheses of visual recognition

(C) examining the evidence supporting the serial-

*5*

*10*

*15*

object is encountered again, it is matched with its internal

representation and thereby recognized. Controversy

surrounds the question of whether recognition is a parallel,

one-step process or a serial, step-by-step one.

Psychologists of the Gestalt school maintain that objects

are recognized as wholes in a parallel procedure: the

internal representation is matched with the retinal image in

a single operation. Other psychologists have proposed that

internal representation features are matched serially with

an object‘s features. Although some experiments show

that, as an object becomes familiar, its internal

representation becomes more holistic and the recognition

process correspondingly more parallel, the weight of

evidence seems to support the serial hypothesis, at least

for objects that are not notably simple and familiar.

(151 words)

17

recognition hypothesis

(D) discussing visual recognition and some

hypotheses proposed to explain it

(E) reporting on recent experiments dealing with

memory systems and their relationship to

neural activity

**For the following question, consider each of the**

**choices separately and select all that apply**

13. According to the passage, Gestalt psychologists

make which of the following suppositions about

visual recognition?

A A retinal image is in exactly the same forms as its

internal representation.

B An object is recognized as a whole without any need

for analysis into component parts.

C The matching of an object with its internal

representation occurs in only one step.

[*This page is intentionally left blank*. ]

18

**Exercise 4**

It is a popular misconception that nuclear fusion

power is free of radioactivity; in fact, the deuterium-

tritium reaction that nuclear scientists are currently

*Line* exploring with such zeal produces both alpha particles

1. It can be inferred from the passage that the

author believes which of the following about the

current state of public awareness concerning

nuclear fusion power?

*5*

*10*

and neutrons. (The neutrons are used to produce tritium

from a lithium blanket surrounding the reactor.)

Another common misconception is that nuclear fusion

power is a virtually unlimited source of energy because

of the enormous quantity of deuterium in the sea.

Actually, its limits are set by the amount of available

lithium, which is about as plentiful as uranium in the

Earth‘s crust. Research should certainly continue on

controlled nuclear fusion, but no energy program

should be premised on its existence until it has proven

(A) The public has been deliberately misinformed

about the advantages and disadvantages of

nuclear fusion power.

(B) The public is unaware of the principal

advantage of nuclear fusion over nuclear

fission as an energy source.

(C) The public‘s awareness of the scientific

facts concerning nuclear fusion power is

somewhat distorted and incomplete.

(D) The public is not interested in increasing its

*15*

practical.

(122 words)

awareness of the advantages and

disadvantages of nuclear fusion power.

(E) The public is aware of the disadvantages of

nuclear fusion power but not of its

advantages.

**For the following question, consider each of the**

**choices separately and select all that apply**

2. The passage provides information that would

answer which of the following questions EXCEPT?

A How much incidental radiation is produced

in the deuterium tritium fusion reaction?

B What is likely to be the principal source of

deuterium for nuclear fusion power?

C Why are scientists exploring the deuterium-

tritium fusion reaction with such zeal?

19

Roger Rosenblatt‘s book *Black Fiction*, in attempting

to apply literary rather than sociopolitical criteria to its

subject, successfully alters the approach taken by

*Line* most previous studies. As Rosenblatt notes, criticism

naturalistic modes of expression?

In spite of such omissions, what Rosenblatt does

*50* include in his discussion makes for an astute and

worthwhile study. *Black Fiction* surveys a wide variety

*5*

*10*

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*20*

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*30*

*35*

*40*

*45*

of Black writing has often served as a pretext for

expounding on Black history. Addison Gayle‘s recent

work, for example, judges the value of Black fiction by

overtly political standards, rating each work according to

the notions of Black identity which it propounds.

Although fiction assuredly springs from political

circumstances, its authors react to those circumstances in

ways other than ideological, and talking about novels and

stories primarily as instruments of ideology circumvents

much of the fictional enterprise. Rosenblatt‘s literary

analysis discloses affinities and connections among works

of Black fiction which solely political studies have

overlooked or ignored. Writing acceptable criticism of

Black fiction, however, presupposes giving satisfactory

answers to a number of questions. First of all, is there a

sufficient reason, other than the racial identity of the

authors, to group together works by Black authors?

Second, how does Black fiction make itself distinct from

other modern fiction with which it is largely

contemporaneous? Rosenblatt shows that Black fiction

constitutes a distinct body of writing that has an

identifiable, coherent literary tradition. Looking at novels

written by Blacks over the last eighty years, he discovers

recurring concerns and designs independent of

chronology. These structures are thematic, and they

spring, not surprisingly, from the central fact that the

Black characters in these novels exist in a predominantly

White culture, whether they try to conform to that culture

of rebel against it.

*Black Fiction* does leave some aesthetic questions

open. Rosenblatt‘s thematic analysis permits considerable

objectivity; he even explicitly states that it is not his

intention to judge the merit of the various works—yet his

reluctance seems misplaced, especially since an attempt

to appraise might have led to interesting results. For

instance, some of the novels appear to be structurally

diffuse. Is this a defect, or are the authors working out of,

or trying to forge, a different kind of aesthetic? In

addition, the style of some Black novels, like Jean

Toomer‘s *Cane*, verges on expressionism or surrealism;

does this technique provide a counterpoint to the

of novels, bringing to our attention in the process some

fascinating and little-known works like James Weldon

Johnson‘s *Autobiography of an Ex-Colored Man*. Its

*55* argument is tightly constructed, and its forthright, lucid

style exemplifies levelheaded and penetrating criticism.

prevalent theme that portrays the fate against which Black

heroes are pitted, a theme usually conveyed by more

20

3. The author of the passage objects to criticism of

Black fiction like that by Addison Gayle

because it

(A) emphasizes purely literary aspects of such

fiction

(B) misinterprets the ideological content of

such fiction

(C) misunderstands the notions of Black

identity contained in such fiction

(D) substitutes political for literary criteria in

evaluating such fiction

(E) ignores the interplay between Black history

and Black identity displayed in such fiction

4. The author of the passage is primarily concerned with

(A) evaluating the soundness of a work of criticism

(B) comparing various critical approaches to a subject

(C) discussing the limitations of a particular

kind of criticism

(D) summarizing the major points made in a

work of criticism

(E) explaining the theoretical background of a

certain kind of criticism

21

5. The author of the passage believes that *Black*

*Fiction* would have been improved had

Rosenblatt

(A) evaluated more carefully the ideological

and historical aspects of Black fiction

(B) attempted to be more objective in his

approach to novels and stories by Black

authors

(C) explored in greater detail the recurrent

thematic concerns of Black fiction

throughout its history

(D) established a basis for placing Black fiction

within its own unique literary tradition

(E) assessed the relative literary merit of the

novels he analyzes thematically

6. The author of the passage refers to James

Weldon Johnson‘s *Autobiography of an Ex-*

*Colored Man* most probably in order to

(A) point out affinities between Rosenblatt‘s

method of thematic analysis and earlier

criticism

(B) clarify the point about expressionistic style

made earlier in the passage

(C) qualify the assessment of Rosenblatt‘s book

made in the first paragraph of the passage

(D) illustrate the affinities among Black novels

disclosed by Rosenblatt‘s literary analysis

(E) give a specific example of one of the

accomplishments of Rosenblatt‘s work

The transfer of heat and water vapor from the ocean

to the air above it depends on a disequilibrium at the

interface of the water and the air. Within about a

*Line* millimeter of the water, air temperature is close to that of

**For the following question, consider each of the**

**choices separately and select all that apply**

7. According to the passage, wind over the ocean

*5*

*10*

the surface water, and the air is nearly saturated with

water vapor. But the differences, however small, are

crucial, and the disequilibrium is maintained by air near

the surface mixing with air higher up, which is typically

appreciably cooler and lower in water-vapor content.

The air is mixed by means of turbulence that depends

on the wind for its energy. As wind speed increases, so

does turbulence, and thus the rate of heat and moisture

transfer. Detailed understanding of this phenomenon

generally does which of the following?

A Causes relatively cool, dry air to come into proximity

with the ocean surface.

B Maintains a steady rate of heat and moisture

transfer between the ocean and the air.

C Causes frequent changes in the temperature of

the water at the ocean‘s surface.

awaits further study.

(127 words)

22

8. The passage suggests that if on a certain day the

wind were to decrease until there was no wind at

all which of the following would occur?

(A) The air closest to the ocean surface would

become saturated with water vapor.

(B) The air closest to the ocean surface would be

warmer than the water.

(C) The amount of moisture in the air closest to

the ocean surface would decrease.

(D) The rate of heat and moisture transfer would

increase.

(E) The air closest to the ocean would be at the

same temperature as air higher up.

―I want to criticize the social system, and to show it at

work, at its most intense.‖ Virginia Woolf‘s provocative

statement about her intentions in writing *Mrs. Dalloway*

*Line* has regularly been ignored by the critics, since it

9. In the first paragraph of the passage, the author‘s

attitude toward the literary critics mentioned can

best be described as

(A) disparaging

*5*

*10*

*15*

highlights an aspect of her literary interests very different

from the traditional picture of the ―poetic‖ novelist

concerned with examining states of reverie and vision and

with following the intricate pathways of individual

consciousness. But Virginia Woolf was a realistic as well

as a poetic novelist, a satirist and social critic as well as a

visionary: literary critics‘ cavalier dismissal of Woolf‘s

social vision will not withstand scrutiny.

In her novels, Woolf is deeply engaged by the

questions of how individuals are shaped (or deformed) by

their social environments, how historical forces impinge

on people‘s lives, how class, wealth, and gender help to

determine people‘s fates. Most of her novels are rooted in

a realistically rendered social setting and in a precise

(B) ironic

(C) facetious

(D) skeptical but resigned

(E) disappointed but hopeful

10. It can be inferred from the passage that the most

probable reason Woolf realistically described the

social setting in the majority of her novels was

that she

(A) was aware that contemporary literary critics

considered the novel to be the most

realistic of literary genres

(B) was interested in the effect of a person‘s

social milieu on his or her character and

historical time.

(163 words)

23

actions

(C) needed to be as attentive to detail as

possible in her novels in order to support

the arguments she advanced in them

(D) wanted to show that a painstaking fidelity

in the representation of reality did not in

any way hamper the artist

(E) wished to prevent critics from charging that

her novels were written in an ambiguous

and inexact style

11. In the context of the passage, ―poetic‖ is closest in

meaning to

A socioeconomic

B realistic

C political

D visionary

E literary

**Exercise 5**

Many theories have been formulated to explain the

researchers were not fully accepted, however, until the

role of grazers such as zooplankton in controlling the

amount of planktonic algae (phytoplankton) in lakes.

*Line* The first theories of such grazer control were merely

*45*

grazing rates of zooplankton were determined directly

in the field, by means of new experimental techniques.

Using a specially prepared feeding chamber, Haney

*5*

based on observations of negative correlations

between algal and zooplankton numbers. A low num-

was able to record zooplankton grazing rates in natural

field conditions. In the periods of peak zooplankton

ber of algal cells in the presence of a high number of

grazers suggested, but did not prove, that the grazers

had removed most of the algae. The converse obser-

*50*

abundance, that is, in the late spring and in the summer,

Haney recorded maximum daily community grazing

rates, for nutrient-poor lakes and bog lakes, respectively,

*10*

vation, of the absence of grazers in areas of high

phytoplankton concentration, led Hardy to propose

of 6.6 percent and 114 percent of daily phytoplankton

production. Cladocerans had higher grazing rates than

his principle of animal exclusion, which hypothe-

sized that phytoplankton produced a repellent that

excluded grazers from regions of high phytoplankton

*55*

copepods, usually accounting for 80 percent of the

community grazing rate. These rates varied seasonally,

reaching the lowest point in the winter and early spring.

15

concentration. This was the first suggestion of algal

defenses against grazing.

Haney‘s thorough research provides convincing field

evidence that grazers can exert significant pressure on

Perhaps the fact that many of these first studies

*60*

phytoplankton population.

(461 words)

considered only algae of a size that could be collected

in a net (net phytoplankton), a practice that over-

*20*

*25*

*30*

*35*

*40*

looked the smaller phytoplankton (nannoplankton)

that we now know grazers are most likely to feed on,

led to a de-emphasis of the role of grazers in subse-

quent research. Increasingly, as in the individual

studies of Lund, Round, and Reynolds, researchers

began to stress the importance of environmental

factors such as temperature, light, and water move-

ments in controlling algal numbers. These environ-

mental factors were amenable to field monitoring and

to simulation in the laboratory. Grazing was believed

to have some effect on algal numbers, especially after

phytoplankton growth rates declined at the end of

bloom periods, but grazing was considered a minor

component of models that predicted algal population

dynamics.

The potential magnitude of grazing pressure on

freshwater phytoplankton has only recently been

determined empirically. Studies by Hargrave and

Geen estimated natural community grazing rates by

measuring feeding rates of individual zooplankton

species in the laboratory and then computing com-

munity grazing rates for field conditions using the

known population density of grazers. The high esti-

mates of grazing pressure postulated by these

24

1. It can be inferred from the passage that the ―first

theories‖ of grazer control mentioned in the first

paragraph would have been more convincing if

researchers had been able to

(A) observe high phytoplankton numbers under

natural lake conditions

(B) discover negative correlations between

algae and zooplankton numbers from their

field research

(C) understand the central importance of

environmental factors in controlling the

growth rates of phytoplankton

(D) make verifiable correlations of cause and

effect between zooplankton and

phytoplankton numbers

(E) invent laboratory techniques that would

have allowed them to bypass their field

research concerning grazer control

2. Which of the following, if true, would call into

question Hardy‘s principle of animal exclusion?

(A) Zooplankton are not the only organisms

that are affected by phytoplankton

repellents.

(B) Zooplankton exclusion is unrelated to

phytoplankton population density.

(C) Zooplankton population density is higher

during some parts of the year than during

others.

(D) Net phytoplankton are more likely to

exclude zooplankton than are

nannoplankton.

(E) Phytoplankton numbers can be strongly

affected by environmental factors.

**For the following question, consider each of the**

**choices separately and select all that apply**

3. The author would be likely to agree with

which of the following statements regarding

the pressure of grazers on phytoplankton

numbers?

A Grazing pressure can vary according to the

individual type of zooplankton.

B Grazing pressure can be lower in nutrient-poor lakes

than in bog lakes.

C Grazing tends to exert about the same

pressure as does temperature.

25

4. It can be inferred from the passage that one way

in which many of the early researchers on grazer

control could have improved their data would

have been to

(A) emphasize the effects of temperature, rather

than of light, on phytoplankton

(B) disregard nannoplankton in their analysis of

phytoplankton numbers

(C) collect phytoplankton of all sizes before

analyzing the extent of phytoplankton

concentration

(D) recognize that phytoplankton other than net

phytoplankton could be collected in a net

(E) understand the crucial significance of net

phytoplankton in the diet of zooplankton

5. According to the passage, Hargrave and Geen

did which of the following in their experiments?

(A) They compared the grazing rates of

individual zooplankton species in the

laboratory with the natural grazing rates

of these species.

(B) The hypothesized about the population

density of grazers in natural habitats by

using data concerning the population

density of grazers in the laboratory.

(C) They estimated the community grazing rates

of zooplankton in the laboratory by using

data concerning the natural community

grazing rates of zooplankton.

(D) They estimated the natural community

grazing rates of zooplankton by using

data concerning the known population

density of phytoplankton.

(E) They estimated the natural community

grazing rates of zooplankton by using

laboratory data concerning the grazing

rates of individual zooplankton species.

The belief that art originates in intuitive rather than

rational faculties was worked out historically and

philosophically in the somewhat wearisome volumes of

*Line* Benedetto Croce, who is usually considered the originator

6. The passage suggests that which of the following

would most likely have occurred if linear perspective

and anatomy had not come to influence artistic

endeavor?

*5*

of a new aesthetic. Croce was, in fact, expressing a very

(A) The craftsmanship that shaped Gothic

old idea. Long before the Romantics stressed intuition

and self-expression, the frenzy of inspiration was

regarded as fundamental to art, but philosophers had

always assumed it must be controlled by law and by the

*10* intellectual power of putting things into harmonious order.

This general philosophic concept of art was supported by

technical necessities. It was necessary to master certain

laws and to use intellect in order to build Gothic

cathedrals, or set up the stained glass windows of

architecture would have continued to

dominate artists‘ outlooks.

(B) Some other technical elements would have

been adopted to discipline artistic inspiration.

(C) Intellectual control over artistic inspiration

would not have influenced painting as it

did architecture.

(D) The role of intuitive inspiration would not

have remained fundamental to theories of

*15*

Chartres. When this bracing element of craftsmanship

ceased to dominate artists‘ outlook, new technical

elements had to be adopted to maintain the intellectual

element in art. Such were linear perspective and anatomy.

(156 words)

26

artistic creation.

(E) The assumptions of aesthetic philosophers

before Croce would have been invalidated.

7. Select the sentence in the passage that indicates a

traditional assumption of aesthetic philosophers.

8. The author mentions ―linear perspective and

anatomy‖ in the last sentence in order to do

which of the following ?

(A) Expand his argument to include painting as

well as architecture

(B) Indicate his disagreement with Croce‘s

theory of the origins of art

(C) Support his point that rational order of

some kind has often seemed to discipline

artistic inspiration

(D) Explain the rational elements in Gothic

painting that corresponded to craftsmanship

in Gothic architecture

(E) Show the increasing sophistication of artists

after the Gothic period

Nahuatl, like Greek and German, is a language that

allows the formation of extensive compounds. By the

combination of radicals or semantic elements, single

*Line* compound words can express complex conceptual

9. According to the passage, some abstract

universal ideas can be expressed in Nahuatl by

(A) taking away from a word any reference to

particular instances

*5*

*10*

*15*

relations, often of an abstract universal character.

The *tlamatinime* (―those who know‖) were able to

use this rich stock of abstract terms to express the

nuances of their thought. They also availed themselves

of other forms of expression with metaphorical meaning,

some probably original, some derived from Toltec

coinages. Of these forms the most characteristic in

Nahuatl is the juxtaposition of two words that, because

they are synonyms, associated terms, or even contraries,

complement each other to evoke one single idea. Used as

metaphor, the juxtaposed terms connote specific or

essential traits of the being they refer to, introducing a

mode of poetry as an almost habitual form of expression.

(B) removing a word from its associations with

other words

(C) giving a word a new and opposite meaning

(D) putting various meaningful elements

together in one word

(E) turning each word of a phrase into a poetic

metaphor

**For the following question, consider each of the**

**choices separately and select all that apply**

10. It can be inferred solely from the information

in the passage EXCEPT that

(140 words)

A all abstract universal ideas are ideas of

complex relations

B some record or evidence of the thought of

the *tlamatinime* exists

C metaphors are always used in Nahuatl to

express abstract conceptual relationships

27

Since science tries to deal with reality, even the most

precise sciences normally work with more or less

imperfectly understood approximations toward which

*Line* scientists must maintain an appropriate skepticism. Thus,

11. According to the passage, scientists are skeptical

toward their equations because scientists

(A) work to explain real, rather than theoretical

or simplified, situations

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for instance, it may come as a shock to mathematicians to

learn that the Schrodinger equation for the hydrogen atom

is not a literally correct description of this atom, but only

an approximation to a somewhat more correct equation

taking account of spin, magnetic dipole, and relativistic

effects; and that this corrected equation is itself only an

imperfect approximation to an infinite set of quantum

field-theoretical equations. Physicists, looking at the

original Schrodinger equation, learn to sense in it the

presence of many invisible terms in addition to the

differential terms visible, and this sense inspires an

entirely appropriate disregard for the purely technical

features of the equation. This very healthy skepticism is

foreign to the mathematical approach. Mathematics must

deal with well-defined situations. Thus, mathematicians

depend on an intellectual effort outside of mathematics

for the crucial specification of the approximation that

(B) know that well-defined problems are often

the most difficult to solve

(C) are unable to express their data in terms of

multiple variables

(D) are unwilling to relax the axioms they have

developed

(E) are unable to accept mathematical

explanations of natural phenomena

12. The author implies that scientists develop a

healthy skepticism because they are aware that

(A) mathematicians are better able to solve

problems than are scientists

(B) changes in axiomatic propositions will

inevitably undermine scientific arguments

(C) well-defined situations are necessary for the

design of reliable experiments

mathematics is to take literally.

(177 words)

28

(D) mathematical solutions can rarely be

applied to real problems

(E) some factors in most situations must remain

unknown

**Exercise 6**

Some modern anthropologists hold that biological

evolution has shaped not only human morphology but

also human behavior. The role those anthropologists

*Line* ascribe to evolution is not of dictating the details of

1. Which of the following most probably provides

an appropriate analogy from human morphol-

ogy for the ―details‖ versus ―constraints‖

distinction made in the passage in relation to

*5*

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*15*

*20*

human behavior but one of imposing constraints—

ways of feeling, thinking, and acting that ―come natu-

rally‖ in archetypal situations in any culture. Our

―frailties‖ –emotions and motives such as rage, fear,

greed, gluttony, joy, lust, love—may be a very mixed

assortment, but they share at least one immediate

quality: we are, as we say, ―in the grip‖ of them. And

thus they give us our sense of constraints.

Unhappily, some of those frailties—our need for

ever-increasing security among them—are presently

maladaptive. Yet beneath the overlay of cultural

detail, they, too, are said to be biological in direction,

and therefore as natural to us as are our appendixes.

We would need to comprehend thoroughly their

adaptive origins in order to understand how badly they

guide us now. And we might then begin to resist their

pressure.

29

human behavior?

(A) The ability of most people to see all the

colors of the visible spectrum as against

most people‘s inability to name any but

the primary colors

(B) The ability of even the least fortunate

people to show compassion as against

people‘s inability to mask their feelings

completely

(C) The ability of some people to dive to great

depths as against most people‘s inability

to swim long distances

(D) The psychological profile of those people

who are able to delay gratification as

against people‘s inability to control their

lives completely

(E) The greater lung capacity of mountain

peoples that helps them live in oxygen-poor

air as against people‘s inability to fly

without special apparatus

2. It can be inferred that in his discussion of

maladaptive frailties the author assumes that

(A) evolution does not favor the emergence of

adaptive characteristics over the emergence

of maladaptive ones

(B) any structure or behavior not positively

adaptive is regarded as transitory in

evolutionary theory

(C) maladaptive characteristics, once fixed,

make the emergence of other maladaptive

characteristics more likely

(D) the designation of a characteristic as being

maladaptive must always remain highly

tentative

(E) changes in the total human environment can

outpace evolutionary change

The molecules of carbon dioxide in the Earth‘s

atmosphere affect the heat balance of the Earth by

acting as a one-way screen. Although these molecules

*Line* allow radiation at visible wavelengths, where most of

3. According to the passage, the greatest part of

the solar energy that reaches the Earth is

(A) concentrated in the infrared spectrum

(B) concentrated at visible wavelengths

*5*

*10*

the energy of sunlight is concentrated, to pass

through, they absorb some of the longer-wavelength,

infrared emissions radiated from the Earth‘s surface,

radiation that would otherwise be transmitted back

into space. For the Earth to maintain a constant aver age

temperature, such emissions from the planet must

balance incoming solar radiation. If there were no car-bon

dioxide in the atmosphere, heat would escape from the

Earth much more easily. The surface temperature would

be so much lower that the oceans might be a solid mass

(C) absorbed by carbon dioxide molecules

(D) absorbed by atmospheric water vapor

(E) reflected back to space by snow and ice

**For the following question, consider each of the**

**choices separately and select all that apply**

4. According to the passage, atmospheric carbon

dioxide performs which of the following functions

A absorbing radiation at visible wavelengths

15

of ice.

(120 words)

B absorbing outgoing radiation from the Earth

C helping to retain heat near the Earth‘s surface

30

Initially the Vinaver theory that Malory‘s eight

romances, once thought to be fundamentally unified.

were in fact eight independent works produced both a

*Line* sense of relief and an unpleasant shock. Vinaver‘s

**For the following question, consider each of the**

**choices separately and select all that apply**

5. It can be inferred from the passage that the author

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theory comfortably explained away the apparent

contradictions of chronology and made each romance

independently satisfying. It was, however, disagreeable

to find that what had been thought of as one book was

now eight books. Part of this response was the natural

reaction to the disturbance of set ideas. Nevertheless,

even now, after lengthy consideration of the theory‘s

refined but legitimate observations, one cannot avoid

the conclusion that the eight romances are only one

work. It is not quite a matter of disagreeing with the

theory of independence, but of rejecting its implications:

that the romances may be taken in any or no particular

order, that they have no cumulative effect, and that they

are as separate as the works of a modern novelist.

(154 words)

31

believes which of the following about Malory‘s

works?

A There are meaningful links between and

among the romances.

B The subtleties of the romances are obscured

when they are taken as one work.

C Any contradictions in chronology among the

romances are less important than their over-

all unity.

6. The author of the passage concedes which of the

following about the Vinaver theory?

(A) It gives a clearer understanding of the unity of

Malory‘s romances.

(B) It demonstrates the irrationality of considering

Malory‘s romances to be unified.

(C) It establishes acceptable links between Malory‘s

romances and modern novels.

(D) It unifies earlier and later theories concerning

the chronology of Malory‘s romances.

(E) It makes valid and subtle comments about

Malory‘s romances.

7. Select the sentence in the passage that suggests that, in

evaluating the Vinaver theory, some critics were

initially biased by previous interpretations of Malory‘s

work.

The historian Frederick J. Turner wrote in the 1890‘s

that the agrarian discontent that had been developing

steadily in the United States since about 1870 had been

*Line* precipitated by the closing of the internal frontier--that is,

9. According to the author, changes in the

conditions of international trade resulted in an

(A) underestimation of the amount of new land

that was being famed in the United States

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the depletion of available new land needed for further

expansion of the American farming system. Actually,

however, new lands were taken up for farming in the

United States throughout and beyond the nineteenth

century. The emphasis of the presumed disappearance of

the American frontier obscured the great importance of

changes in the conditions and consequences of

international trade that occurred during the second half of

the nineteenth century. Huge tracts of land were being

settled and farmed in Argentina, Australia, Canada, and in

the American West, and these areas were joined with one

another and with the countries of Europe into an

interdependent market system. Consequently, agrarian

depressions no longer were local or national in scope, and

they struck several nations whose internal frontiers had

not vanished or were not about to vanish. Between the

early 1870‘s and the 1890‘s, the mounting agrarian

discontent in America paralleled the almost uninterrupted

decline in the prices of American agricultural products on

foreign markets.

(198 words)

8. The author is primarily concerned with

(A) showing that a certain interpretation is

better supported by the evidence than is

an alternative explanation

(B) developing an alternative interpretation by

using sources of evidence that formerly

had been unavailable

(C) questioning the accuracy of the evidence

that most scholars have used to counter

the author‘s own interpretation

(D) reviewing the evidence that formerly had

been thought to obscure a valid

interpretation

(E) presenting evidence in support of a

controversial version of an earlier

interpretation.

32

(B) underutilization of relatively small but rich

plots of land

(C) overexpansion of the world transportation

network for shipping agricultural

products

(D) extension of agrarian depressions beyond

national boundaries

(E) emphasis on the importance of market

forces in determining the prices of

agricultural products

10. The author implies that, after certain territories

and countries had been joined into an

interdependent market system in the

nineteenth century, agrarian depressions

within that system

(A) spread to several nations, excluding those in

which the internal frontier remained open

(B) manifested themselves in several nations,

including those in which new land

remained available for farming

(C) slowed down the pace of new technological

developments in international

communications and transportation

(D) affected the local and national prices of the

nonagricultural products of several nations

(E) encouraged several nations to sell more of

their agricultural products on foreign

markets

11. The author‘s argument implies that, compared

to the yearly price changes that actually

occurred on foreign agricultural markets during

the 1880‘s, American farmers would have most

preferred yearly price changes that were

(A) much smaller and in the same direction

(B) much smaller but in the opposite direction

(C) slightly smaller and in the same direction

(D) similar in size but in the opposite direction

(E) slightly greater and in the same direction

When the same parameters and quantitative theory

are used to analyze both termite colonies and troops

of rhesus macaques, we will have a unified science of

sociobiology. I have been increasingly impressed with the

functional similarities between insect and vertebrate

societies and less so with the structural differences that

seem, at first glance, to constitute such an immense gulf

between them. Consider termites and macaques. Both

form cooperative groups that occupy territories. In both

kinds of society there is a well-marked division of labor.

Members of both groups communicate to each other

hunger, alarm, hostility, caste status or rank, and

reproductive status. From the specialist‘s point of view,

this comparison may at first seem facile—or worse. But it

is out of such deliberate oversimplification that the

12. Which of the following best summarizes the

author‘s main point?

(A) Oversimplified comparisons of animal

societies could diminish the likelihood of

developing a unified science of

sociobiology.

(B) Understanding the ways in which animals as

different as termites and rhesus macaques

resemble each other requires train in

both biology and sociology.

(C) Most animals organize themselves into

societies that exhibit patterns of group

behavior similar to those of human

societies.

(D) Animals as different as termites and rhesus

beginnings of a general theory are made.

(134 words)

33

macaques follow certain similar and

predictable patterns of behavior.

(E) A study of the similarities between insect

and vertebrate societies could provide the

basis for a unified science of sociobiology.

13. Select the sentence in the passage in which the author

suggests that There are significant structural

differences

between insect and vertebrate societies.

**Exercise 7**

Hydrogeology is a science dealing with the properties,

distribution, and circulation of water on the surface of the

land, in the soil and underlying rocks, and

1. It can be inferred that which of the following

is most likely to be the subject of study by a

geohydrologist?

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in the atmosphere. The term ―geohydrology‖ is

sometimes erroneously used as a synonym for

―hydrogeology.‖ Geohydrology is concerned with

underground water. There are many formations that

contain water but are not part of the hydrologic cycle

because of geologic changes that have isolated them

underground. These systems are properly termed

geohydrologic but not hydrogeologic. Only when a

system possesses natural or artificial boundaries that

associate the water within it with the hydrologic cycle

may the entire system properly be termed hydrogeologic.

(107 words)

34

(A) Soft, porous rock being worn away by a

waterfall

(B) Water depositing minerals on the banks of a

gorge through which the water runs

(C) The trapping of water in a sealed

underground rock cavern through the action

of an earthquake

(D) Water becoming unfit to drink through the

release of pollutants into it from a

manufacturing plant

(E) The changing course of a river channel as

the action of the water wears away the rocks

past which the river flows

2. The author refers to ―many formations‖ primarily in

order to

(A) clarify a distinction

(B) introduce a subject

(C) draw an analogy

(D) emphasize a similarity

(E) resolve a conflict

In the 1750‘s, when salons were firmly established

in France, some English women, who called

themselves ―Bluestocking,‖ followed the example of

4. The author refers to differences in social back-

ground between *salonnieres* and Bluestockings

in order to do which of the following?

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the *salonnieres* (French salon hostesses) and formed

their own salons. Most Bluestockings did not wish to

mirror the *salonnieres*; they simply desired to adapt a

proven formula to their own purpose—the elevation

of women‘s status through moral and intellectual

training. Differences in social orientation and back-

ground can account perhaps for differences in the

nature of French and English salons. The French

salon incorporated aristocratic attitudes that exalted

courtly pleasure and emphasized artistic accomplish-

ments. The English Bluestockings, originating from a

more modest background, emphasized learning and

work over pleasure. Accustomed to the regimented life

of court circles, *salonnieres* tended toward formality

in their salons. The English women, though somewhat

puritanical, were more casual in their approach.

(139 words)

3. According to the passage, a significant distinction

between the *salonniere*s and Bluestockings was in the

way each group regarded which of the following?

(A) The value of acquiring knowledge

(B) The role of pleasure in the activities of the

literary salon

(C) The desirability of a complete break with

societal traditions

(D) The inclusion of women of different back-

grounds in the salons

(E) The attainment of full social and political

equality with men

35

(A) Criticize the view that their choices of

activities were significantly influenced by

male salon members

(B) Discuss the reasons why literary salons in

France were established before those in

England

(C) Question the importance of the

Bluestockings in shaping public attitudes

toward educated women

(D) Refute the argument that the French salons

had little influence over the direction the

English salons took

(E) Explain the differences in atmosphere and

style in their salons

**For the following question, consider each of the**

**choices separately and select all that apply**

5. Which of the following statements is most

compatible with the principles of the *salonnieres*

as described in the passage?

A Devotion to pleasure and art is justified in

itself.

B Men should be excluded from groups of

women‘s rights supporters.

C Women should aspire to be not only

educated but independent as well.

The use of heat pumps has been held back

largely by skepticism about advertisers‘ claims that

heat pumps can provide as many as two units of

thermal energy for each unit of electrical energy

used, thus apparently contradicting the principle of

6. If the author‘s assessment of the use of heat pumps is

correct, which of the following best expresses the

lesson that advertisers should learn from this case?

(A) Do not make exaggerated claims about the

products you are trying to promote.

energy conservation.

(43 words)

36

(B) Focus your advertising campaign on vague

analogies and veiled implications instead of

on facts.

(C) Do not use facts in your advertising that will

strain the prospective client‘s ability to

believe.

(D) Do not assume in your advertising that the

prospective clients know even the most

elementary scientific principles.

(E) Concentrate your advertising firmly on financially

relevant issues such as price discounts and

efficiency of operation.

All of Francoise Duparc‘s surviving paintings blend

portraiture and genre. Her subjects appear to be acquain-

tances whom she has asked to pose; she has captured

*Line* both their self-consciousness and the spontaneity of their

7. According to the passage, modern viewers are not

likely to value which of the following qualities in a

painting?

(A) The technical elements of the painting

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everyday activities, the depiction of which characterizes

genre painting. But genre painting, especially when it

portrayed members of the humblest classes, was never

popular in eighteenth-century France. The Le Nain

brothers and Georges de La Tour, who also chose such

themes, were largely ignored. Their present high standing

is due to a different, more democratic political climate

and to different aesthetic values: we no longer require

artists to provide ideal images of humanity for our moral

edification but rather regard such idealization as a falsifi-

cation of the truth. Duparc gives no improving message

and discreetly refrains from judging her subjects. In brief,

her works neither elevate nor instruct. This restraint

largely explains her lack of popular success during her

lifetime, even if her talent did not go completely unrecog-

nized by her eighteenth-century French contemporaries.

37

(B) The spontaneity of the painting

(C) The moral lesson imparted by the painting

(D) The degree to which the painting realistically

depicts its subject

(E) The degree to which the artist‘s personality is

revealed in the painting

8. If the history of Duparc‘s artistic reputation were

to follow that of the Le Nain brothers and Georges

de La Tour, present-day assessments of her work

would be likely to contain which of the following?

(A) An evaluation that accords high status to her

work

(B) Acknowledgement of her technical expertise

but dismissal of her subject matter as trivial

(C) Agreement with assessments made in her own

time but acknowledgements of the excep-

tional quality of a few of her paintings

(D) Placement of her among the foremost artists of

her century

(E) A reclassification of her work as portraiture

rather than genre painting

9. Select the sentence in the passage in which the author

indicates that aesthetic judgments can be influenced

by the political beliefs of those making the judgment.

Flatfish, such as the flounder, are among the few

vertebrates that lack approximate bilateral symmetry

(symmetry in which structures to the left and right of the

*Line* body‘s midline are mirror images). Most striking among

other adaptively significant characteristic. This

*50* situation is one commonly encountered by

evolutionary biologists, who must often decide

whether a characteristic is adaptive or selectively

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the many asymmetries evident in an adult flatfish is eye

placement: before maturity one eye migrates, so that in

an adult flatfish both eyes are on the same side of the

head. While in most species with asymmetries virtually

all adults share the same asymmetry, members of the

starry flounder species can be either left-eyed (both eyes

on the left side of head) or right-eyed. In the waters

between the United States and Japan, the starry flounder

populations vary from about 50 percent left-eyed off the

United States West Coast, through about 70 percent

left-eyed halfway between the United States and Japan,

to nearly 100 percent left-eyed off the Japanese coast.

Biologists call this kind of gradual variation over a

certain geographic rang a ―cline‖ and interpret clines as

strong indications that the variation is adaptive, a

response to environmental differences. For the starry

flounder this interpretation implies that a geometric

difference (between fish that are mirror images of one

another) is adaptive, that left-eyedness in the Japanese

starry flounder has been selected for, which provokes a

perplexing questions: what is the selective advantage in

having both eyes on one side rather than on the other?

The ease with which a fish can reverse the effect of

the sidedness of its eye asymmetry simply by turning

around has caused biologists to study internal anatomy,

especially the optic nerves, for the answer. In all flatfish

the optic nerves cross, so that the right optic nerve is

joined to the brain‘s left side and vice versa. This

crossing introduces an asymmetry, as one optic nerve

must cross above or below the other. G. H. Parker

reasoned that if, for example, a flatfish‘s left eye

migrated when the right optic nerve was on top, there

would be a twisting of nerves, which might be

mechanically disadvantageous. For starry flounders, then,

the left-eyed variety would be selected against, since in a

starry flounder the left optic nerve is uppermost.

The problem with the above explanation is that the

Japanese starry flounder population is almost exclusively

left-eyed, and natural selection never promotes a purely

less advantageous variation. As other explanations

proved equally untenable, biologists concluded that there

is no important adaptive difference between left-

eyedness and right-eyedness, and that the two

characteristics are genetically associated with some

38

neutral. As for the left-eyed and right-eyed flatfish,

their difference, however striking, appears to be an

*55* evolutionary red herring.

(456 words)

10. According to the passage, starry flounder differ

from most other species of flatfish in that starry

flounder

(A) are not basically bilaterally symmetric

(B) do not become asymmetric until adulthood

(C) do not all share the same asymmetry

(D) have both eyes on the same side of the head

(E) tend to cluster in only certain geographic regions

**For the following question, consider each of the**

**choices separately and select all that apply**

11. The author would be most likely to agree

with which of the following statements

about left-eyedness and right-eyedness in

the starry flounder?

A They are adaptive variations by the starry flounder

to environmental differences.

B They do not seem to give obvious selective

advantages to the starry flounder.

C They occur in different proportions in different

locations.

39

12. According to the passage, a possible disadvantage

associated with eye migration in flatfish is that the

optic nerves can

(A) adhere to one another

(B) detach from the eyes

(C) cross

(D) stretch

(E) twist

13. Which of the following best describes the

organization of the passage as a whole?

(A) A phenomenon is described and an

interpretation presented and rejected.

(B) A generalization is made and supporting

evidence is supplied and weighed.

(C) A contradiction is noted and a resolution is

suggested and then modified.

(D) A series of observations is presented

and explained in terms of the dominant

theory.

(E) A hypothesis is introduced and corroborated

in the light of new evidence.

**Exercise 8**

Heat pumps circulate a fluid refrigerant that cycles

alternatively from its liquid phase to its vapor phase in a

closed loop. The refrigerant, starting as a low-

*Line* temperature, low-pressure vapor, enters a compressor

1. According to the passage, the role of the flow

restriction in a heat pump is to

(A) measure accurately the flow rate of the

refrigerant mass at that point

*5*

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*15*

driven by an electric motor. The refrigerant leaves the

compressor as a hot, dense vapor and flows through a

heat exchanger called the condenser, which transfers

heat from the refrigerant to a body of air. Now the

refrigerant, as a high-pressure, cooled liquid, confronts

a flow restriction which causes the pressure to drop. As

the pressure falls, the refrigerant expands and partially

vaporizes, becoming chilled. It then passes

through a

second heat exchanger, the evaporator, which transfers

heat from the air to the refrigerant, reducing the

temperature of this second body of air.

(126 words)

40

(B) compress and heat the refrigerant vapor

(C) bring about the evaporation and cooling of

refrigerant

(D) exchange heat between the refrigerant and the

air at that point

(E) reverse the direction of refrigerant flow when

needed

Traditionally, the study of history has had fixed

boundaries and focal points—periods, countries,

dramatic events, and great leaders. It also has had clear

*Line* and firm notions of scholarly procedure: how one

2. Which of the following best states the main point of

the passage?

(A) The approach of psychohistorians to historical

study is currently in vogue even though it

*5*

*10*

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*20*

inquires into a historical problem, how one presents and

documents one‘s findings, what constitutes admissible

and adequate proof. The recent popular psychohistory,

committed to Freudian psychoanalysis, takes a radically

different approach. This commitment precludes a

commitment to history as historians have always

understood it. Psychohistory derives its ―facts‖ not from

history, the detailed records of events and their

consequences, but from psychoanalysis of the

individuals who made history, and deduces its theories

not from this or that instance in their lives, but from a

view of human nature that transcends history. It denies

the basic criterion of historical evidence: that evidence

be publicly accessible to, and therefore assessable by,

all historians. Psychohistorians, convinced of the

absolute rightness of their own theories, are also

convinced that theirs is the ―deepest‖ explanation of any

event that other explanations fall short of the truth.

41

lacks the rigor and verifiability of traditional

historical method.

(B) Traditional historians can benefit from studying

the techniques and findings of psychohis-

torians.

(C) Areas of sociological study such as childhood

and work are of little interest to traditional

historians.

(D) The psychological assessment of an individual‘s

behavior and attitudes is more informative

than the details of his or her daily life.

(E) History is composed of unique and nonrepeat-

ing events that must be individually analyzed

on the basis of publicly verifiable evidence.

3. The author of the passage puts the word ―deepest‖ in

quotation marks most probably in order to

(A) question the usefulness of psychohistorians‘

insights into traditional historical scholarship

(B) draw attention to a contradiction in the

psychohistorians‘ method

(C) emphasize the major difference between the

traditional historians‘ method and

that of psychohistorians

(D) disassociate her opinion of the psychohistorians‘

claims from her opinion of their method

(E) signal her reservations about the accuracy

of psychohistorians‘ claims for their work

Eight percent of the Earth‘s crust is aluminum, and

there are hundreds of aluminum-bearing minerals and

vast quantities of the rocks that contain them. The best

*Lin*e aluminum ore is bauxite, defined as aggregates of alumi-

4. The author implies that a mineral must either be or

readily supply which of the following in order to be

classified as an aluminum ore?

(A) An aggregate

*5*

*10*

*15*

nous minerals, more or less impure, in which aluminum

is present as hydrated oxides. Bauxite is the richest of all

those aluminous rocks that occur in large quantities, and

it yields alumina, the intermediate product required for

the production of aluminum. Alumina also occurs natu-

rally as the mineral corundum, but corundum is not

found in large deposits of high purity, and therefore it is

an impractical source for making aluminum. Most of

the many abundant nonbauxite aluminous minerals are

silicates, and, like all silicate minerals, they are

refractory, resistant to analysis, and extremely difficult

to process. The aluminum silicates are therefore

generally unsuitable alternatives to bauxite because

considerably more energy is required to extract alumina

(B) Bauxite

(C) Alumina

(D) Corundum

(E) An aluminum silicate

**For the following question, consider each of the**

**choices separately and select all that apply**

5. The passage supplies information for answering

all of the following questions regarding aluminous

minerals

A Are aluminum-bearing nonbauxite minerals

plentiful?

B Do the aluminous minerals found in bauxite

contain hydrated oxides?

from them.

(153 words)

42

C Are aluminous hydrated oxides found in rocks?

6. The author implies that corundum would be used to

produce aluminum if

(A) corundum could be found that is not contami-

nated by silicates

(B) the production of alumina could be eliminated

as an intermediate step in manufacturing alu-

minum

(C) many large deposits of very high quality corun-

dum were to be discovered

(D) new technologies were to make it possible to

convert corundum to a silicate

(E) manufacturers were to realize that the world‘s

supply of bauxite is not unlimited

Tillie Olsen‘s fiction and essays have been widely

and rightly acknowledged, particularly by contemporary

feminists, as major contributions to American

*Line* literature. Yet few of Olsen‘s readers realize the extent

**For the following question, consider each of the**

**choices separately and select all that apply**

7. According to the author, which of the following

*5*

*10*

*15*

to which her vision and choice of subject are rooted in

an earlier literary heritage—the tradition of radical

political thought, mostly socialist and anarchist, of the

1910‘s and 1920‘s, and the Old Left tradition of the

1930‘s. I do not mean that one can adequately explain

the eloquence of her work in terms of its political

origins, or that left-wing politics were the single most

important influence on it. My point is that its central

consciousness—its profound understanding of class and

gender as shaping influences on people‘s lives—owes

much to that earlier literary heritage.

(126 words)

43

is NOT true of the heritage mentioned in the passage?

A It emphasizes gender as the determinate

influence on people‘s lives.

B It includes political traditions that span three

decades of the twentieth century.

C It has been the most important influence on

Olsen‘s work.

8. Select the sentence in which the author denies possible

interpretations of an earlier assertion.

Our visual perception depends on the reception of

energy reflecting or radiating from that which we wish

to perceive. If our eyes could receive and measure

*Line* infinitely delicate sense-data, we could perceive the

9. Which of the following describes a situation

most analogous to the situation discussed in

the last sentence?

(A) A mathematician can only solve problems

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world with infinite precision. The natural limits of our

eyes have, of course, been extended by mechanical

instruments; telescopes and microscopes, for example,

expand our capabilities greatly. There is, however, an

ultimate limit beyond which no instrument can take us;

this limit is imposed by our inability to receive sense-

data smaller than those conveyed by an individual

quantum of energy.

(97 words)

44

the solution of which can be deduced

from known axioms.

(B) An animal can respond to no command

that is more complicated syntactically

than any it has previously received.

(C) A viewer who has not learned, at least

intuitively, the conventions of painting,

cannot understand perspective in a

drawing.

(D) A sensitized film will record no detail on a

scale that is smaller than the grain of the

film.

(E) A shadow cast on a screen by an opaque

object will have a sharp edge only if the

light source is small or very distant.

Of Homer‘s two epic poems, the *Odyssey* has always

been more popular than the *Iliad*, perhaps because it

includes more features of mythology that are accessible

*Line* to readers. Its subject (to use Maynard Mack‘s

10. The author uses Mack‘s ―categories‖ (lines 4-5)

most probably in order to

(A) argue that the *Iliad* should replace the *Odyssey*

as the more popular poem

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*15*

categories) is ―life-as-spectacle,‖ for readers, diverted

by its various incidents, observe its hero Odysseus

primarily from without; the tragic *Iliad*, however, presents

―life-as- experience‖: readers are asked to identify with

the mind of Achilles, whose motivations render him a

not particularly likable hero. In addition, the *Iliad*, more

than the *Odyssey*, suggests the complexity of the gods‘

involvement in human actions, and to the extent that

modern readers find this complexity a needless

complication, the *Iliad* is less satisfying than the

*Odyssey*, with its simpler ‗scheme‘ of divine justice.

Finally, since the *Iliad* presents a historically verifiable

action, Troy‘s siege, the poem raises historical

questions that are absent from the *Odyssey’s* blithely

imaginative world.

(148 words)

45

(B) indicate Mack‘s importance as a commentator

on the *Iliad* and the *Odyssey*

(C) suggest one way in which the *Iliad* and the

*Odyssey* can be distinguished

(D) point out some of the difficulties faced by

readers of the *Iliad* and the *Odyssey*

(E) demonstrate that the *Iliad* and the *Odyssey*

can best be distinguished by comparing their

respective heroes

11. The passage is primarily concerned with

(A) distinguishing arguments

(B) applying classifications

(C) initiating a debate

(D) resolving a dispute

(E) developing a contrast

12. It can be inferred from the passage that a reader of

the *Iliad* is likely to have trouble identifying with the

poem‘s hero for which of the following reasons?

(A) The hero is eventually revealed to be unheroic.

(B) The hero can be observed by the reader

only from without.

(C) The hero‘s psychology is not historically

verifiable.

(D) The hero‘s emotions often do not seem

appealing to the reader.

(E) The hero‘s emotions are not sufficiently

various to engage the reader‘s attention.

[*This page is intentionally left blank*. ]

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**Exercise 9**

Jean Wagner‘s most enduring contribution to the

study of Afro-American poetry is his insistence that it be

analyzed in a religious, as well as secular, frame of

*Line* reference. The appropriateness of such an approach may

2. All of the following aspects of Afro-American

poetry are referred to in the passage as having been

influenced by Wesleyan hymnals EXCEPT

(A) subject matter

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seem self-evident for a tradition commencing with

spirituals and owing its early forms, rhythms, vocabulary,

and evangelical fervor to Wesleyan hymnals. But before

Wagner a secular outlook that analyzed Black poetry

solely within the context of political and social protest

was dominant in the field.

It is Wagner who first demonstrated the essential

fusion of racial and religious feeling in Afro-American

poetry. The two, he argued, form a symbiotic union in

which religious feelings are often applied to racial issues

and racial problems are often projected onto a

metaphysical plane. Wagner found this most eloquently

illustrated in the Black spiritual, where the desire for

freedom in this world and the hope for salvation in the

next are inextricably intertwined.

(159 words)

1. The primary purpose of the passage is to

(A) contrast the theories of Jean Wagner with

those of other contemporary critics

(B) document the influence of Jean Wagner on the

development of Afro-American poetry

(C) explain the relevance of Jean Wagner ‘s work to

the study of Afro-American religion

(D) indicate the importance of Jean Wagner ‘s

analysis of Afro-American poetry

(E) present the contributions of Jean Wagner to

the study of Black spirituals

47

(B) word choice

(C) rhythm

(D) structure

(E) tone

3. It can be inferred from the passage that, before

Wagner, most students of Afro-American poetry did

which of the following?

(A) Contributed appreciably to the transfer of

political protest from Afro-American poetry to

direct political action.

(B) Ignored at least some of the historical roots of

Afro-American poetry.

(C) Analyzed fully the aspects of social protest

to be found in such traditional forms of Afro-

American poetry as the Black spiritual.

(D) Regarded as unimportant the development

of fervent emotionalism in a portion of Afro-

American poetry.

(E) Concentrated on the complex relations

between the technical elements in Afro-

American poetry and its political content.

In the early 1950‘s, historians who studied

preindustrial Europe (which we may define here as

Europe in the period from roughly 1300 to 1800) began,

*Line* for the first time in large numbers, to investigate more

addition, aggregate population estimates are very

*50* shaky, which makes it difficult for historians to

compare rates of crime per thousand in one decade of

the preindustrial period with rates in another decade.

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of the preindustrial European population than the 2 or 3

percent who comprised the political and social elite: the

kings, generals, judges, nobles, bishops, and local

magnates who had hitherto usually filled history books.

One difficulty, however, was that few of the remaining

97 percent recorded their thoughts or had them

chronicled by contemporaries. Faced with this situation,

many historians based their investigations on the only

records that seemed to exist: birth, marriage, and death

records. As a result, much of the early work on the

nonelite was aridly statistical in nature; reducing the

vast majority of the population to a set of numbers was

hardly more enlightening than ignoring them altogether.

Historians still did not know what these people thought

or felt.

One way out of this dilemma was to turn to the

records of legal courts, for here the voices of the

nonelite can most often be heard, as witnesses, plaintiffs,

and defendants. These documents have acted as ―a point

of entry into the mental world of the poor.‖ Historians

such as Le Roy Ladurie have used the documents to

extract case histories, which have illuminated the

attitudes of different social groups (these attitudes

include, but are not confined to, attitudes toward crime

and the law) and have revealed how the authorities

administered justice. It has been societies that have had

a developed police system and practiced Roman law,

with its written depositions, whose court records have

yielded the most data to historians. In Anglo-Saxon

countries hardly any of these benefits obtain, but it has

still been possible to glean information from the study

of legal documents.

The extraction of case histories is not, however, the

only use to which court records may be put. Historians

who study preindustrial Europe have used the records to

establish a series of categories of crime and to quantify

indictments that were issued over a given number of

years. This use of the records does yield some

information about the nonelite, but this information

gives us little insight into the mental lives of the

nonelite. We also know that the number of indictments

in preindustrial Europe bears little relation to the

number of actual criminal acts, and we strongly suspect

that the relationship has varied widely over time. In

48

Given these inadequacies, it is clear why the case

history use of court records is to be preferred.

(473 words)

4. The author suggests that, before the early 1950‘s,

most historians who studied preindustrial Europe

did which of the following?

(A) Failed to make distinctions among members of the

preindustrial European political and social elite.

(B) Used investigatory methods that were almost

exclusively statistical in nature.

(C) Inaccurately estimated the influence of the

preindustrial European political and social elite.

(D) Confined their work to a narrow range of the

preindustrial European population.

(E) Tended to rely heavily on birth, marriage, and

death records.

5. According to the passage, the case histories

extracted by historians have

(A) scarcely illuminated the attitudes of the political

and social elite

(B) indicated the manner in which those in power

apportioned justice

(C) focused almost entirely on the thoughts and feel-

ings of different social groups toward crime and

the law

(D) been considered the first kind of historical

writing that utilized the records of legal courts

(E) been based for the most part on the trial testimony

of police and other legal authorities

49

6. It can be inferred from the passage that much of the

early work by historians on the European nonelite

of the preindustrial period might have been more

illuminating if these historians had

(A) used different methods of statistical analysis to

investigate the nonelite

(B) been more successful in identifying the attitudes

of civil authorities, especially those who

administered justice, toward the nonelite

(C) been able to draw on more accounts, written by

contemporaries of the nonelite, that described

what this nonelite thought

(D) relied more heavily on the personal records left

by members of the European political and

social elite who lived during the period in

question

(E) been more willing to base their research on the

birth, marriage, and death records of the

nonelite

7. It can be inferred from the passage that a historian

who wished to compare crime rates per thousand

in a European city in one decade of the fifteenth

century with crime rates in another decade of that

century would probably be most aided by better

information about which of the following?

(A) The causes of unrest in the city during the two

decades

(B) The aggregate number of indictments in the

city nearest to the city under investigation

during the two decades

(C) The number of people who lived in the city

during each of the decades under investigation

(D) The mental attitudes of criminals in the city,

including their feelings about authority, during

each of the decades under investigation

(E) The possibilities for a member of the city‘s

nonelite to become a member of the political

and social elite during the two decades

Mycorrhizal fungi infect more plants than do any

other fungi and are necessary for many plants to thrive,

but they have escaped widespread investigation until

*Line* recently for two reasons. First, the symbiotic association

8. Which of the following most accurately describes

the passage?

(A) A description of a replicable experiment

(B) A summary report of new findings

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is so well-balanced that the roots of host plants show no

damage even when densely infected. Second, the fungi

cannot as yet be cultivated in the absence of a living

root. Despite these difficulties, there has been important

new work that suggests that this symbiotic association

can be harnessed to achieve more economical use of

costly superphosphate fertilizer and to permit better

exploitation of cheaper, less soluble rock phosphate.

Mycorrhizal benefits are not limited to improved

phosphate uptake in host plants. In legumes,

Mycorrhizal inoculation has increased nitrogen fixation

beyond levels achieved by adding phosphate fertilizer

alone. Certain symbiotic associations also increase the

host plant‘s resistance to harmful root fungi.

50

(C) A recommendation for abandoning a difficult

area of research

(D) A refutation of an earlier hypothesis

(E) A confirmation of earlier research

**For the following question, consider each of the**

**choices separately and select all that apply**

9. It can be inferred from the passage that which of

the following has NOT been a factor influencing the

extent to which research on mycorrhizal fungi has

progressed?

A Lack of a method for identifying mycorrhizal

fungi

B Difficulties surrounding laboratory production

of specimens for study

C Difficulties ensuing from the high cost and

scarcity of superphosphate fertilizers

It is one of nature‘s great ironies that the availability

of nitrogen in the soil frequently sets an upper limit on

plant growth even though the plants‘ leaves are bathed

*Line* in a sea of nitrogen gas. The leguminous plants—among

10. Which of the following situations is most closely

analogous to the situation described by the author

as one of nature‘s great ironies?

(A) That of a farmer whose crops have failed

*5*

them crop plants such as soybeans, peas, alfalfa, and

clover—have solved the nitrogen supply problem by

entering into a symbiotic relationship with the bacterial

genus *Rhizobium*.

51

because the normal midseason rains did not

materialize and no preparations for

irrigation had been made

(B) That of a long-distance runner who loses a

marathon race because of a wrong turn that

cost him twenty seconds

(C) That of shipwrecked sailors at sea in a

lifeboat, with one flask of drinking water to

share among them

(D) That of a motorist who runs out of gas a mere

five miles from the nearest gas station

(E) That of travelers who want to reach their

destination as fast and as cheaply as possible,

but find that cost increases as travel speed

increases

Throughout human history there have been many

stringent taboos concerning watching other people eat

or eating in the presence of others. There have been

*Line* attempts to explain these taboos in terms of

11. If the argument in the passage is valid, taboos

against eating in the presence of others who are

not also eating would be LEAST likely in a society

that

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inappropriate social relationships either between those

who are involved and those who are not simultaneously

involved in the satisfaction of a bodily need, or

between those already satiated and those who appear

to be shamelessly gorging. Undoubtedly such elements

exist in the taboos, but there is an additional element

with a much more fundamental importance. In

prehistoric times, when food was so precious and the

on-lookers so hungry, not to offer half of the little food

one had was unthinkable, since every glance was a plea

for life.

(124 words)

52

(A) had always had a plentiful supply of food

(B) emphasized the need to share worldly goods

(C) had a nomadic rather than an agricultural

way of life

(D) emphasized the value of privacy

(E) discouraged overindulgence

12. The author‘s hypothesis concerning the origin of

taboos against watching other people eat emphasizes

the

(A) general palatability of food

(B) religious significance of food

(C) limited availability of food

(D) various sources of food

(E) nutritional value of food

13. Select the sentence in the passage in which the author

suggests that past attempts to explain some taboos

concerning eating are incomplete.

**Exercise 10**

Currently, the paramount problem in the field of

biomaterials, the science of replacing diseased tissue with

human-made implants, is control over the interface, or

*Line* surface, between implanted biomaterials and living

1. According to the passage, the major problem

currently facing scientists in the field of bio-

materials is

(A) assessing and regulating the bonding

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tissues. The physical properties of most tissues can be

matched by careful selection of raw materials: metals,

ceramics, or several varieties of polymer materials. Even

the requirement that biomaterials processed from these

materials be nontoxic to host tissue can be met by

techniques derived from studying the reactions of tissue

cultures to biomaterials or from short-term implants. But

achieving necessary matches in physical properties across

interfaces between living and non-living matter requires

knowledge of which molecules control the bonding of

cells to each other—an area that we have not yet explored

thoroughly. Although recent research has allowed us to

stabilize the tissue-biomaterial interface by controlling

either the chemical reactions or the microstructure of the

biomaterials, our fundamental understanding of how

implant devices adhere to tissues remains woefully

between host tissue and implants

(B) controlling the transfer of potentially toxic

materials across the interface of tissue

and implant

(C) discovering new materials from which to

construct implant devices

(D) deciding in what situations implants are

needed

(E) determining the importance of short-term

implants to long-term stability of tissue

implant interfaces

2. The passage suggests which of the following

about the recent research mentioned in the last

sentence ?

(A) It has solved one set of problems but has

incomplete.

(159 words)

53

created another.

(B) It has concentrated on secondary concerns

but has ignored primary concerns.

(C) It has improved practical applications of

biomaterial technology without providing a

complete theoretical explanation of that

improvement.

(D) It has thoroughly investigated properties of

biomaterials but has paid little attention

to relevant characteristics of human tissue.

(E) It has provided considerable information on

short-term implant technology but little

on long-term implant technology.

Islamic law is a particularly instructive example of

―sacred law.‖ Islamic law is a phenomenon so different

from all other forms of law—notwithstanding, of course,

*Line* a considerable and inevitable number of coincidences

merely existed discordance between application of the

*50* sacred law and many of the regulations framed by

Islamic states; this antagonism varied according to place

and time.

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with one or the other of them as far as subject matter and

positive enactment are concerned—that its study is

indispensable in order to appreciate adequately the full

range of possible legal phenomena. Even the two other

representatives of sacred law that are historically and

geographically nearest to it, Jewish law and Roman

Catholic canon law, are perceptibly different.

Both Jewish law and canon law are more uniform

than Islamic law. Though historically there is a

discernible break between Jewish law of the sovereign

state of ancient Israel and of the Diaspora (the dispersion

of Jewish people after the conquest of Israel), the spirit of

the legal matter in later parts of the Old Testament is very

close to that of the Talmud, one of the primary

codifications of Jewish law in the Diaspora. Islam, on the

other hand, represented a radical breakaway from the

Arab paganism that preceded it; Islamic law is the result

of an examination, from a religious angle, of legal subject

matter that was far from uniform, comprising as it did the

various components of the laws of pre-Islamic Arabia and

numerous legal elements taken over from the non-Arab

peoples of the conquered territories. All this was unified

by being subjected to the same kind of religious scrutiny,

the impact of which varied greatly, being almost

nonexistent in some fields, and in others originating novel

institutions. This central duality of legal subject matter

and religious norm is additional to the variety of legal,

ethical, and ritual rules that is typical of sacred law.

In its relation to the secular state, Islamic law

differed from both Jewish and canon law. Jewish law was

buttressed by the cohesion of the community, reinforced

by pressure from outside; its rules are the direct

expression of this feeling of cohesion, tending toward the

accommodation of dissent. Canon and Islamic law, on the

contrary, were dominated by the dualism of religion and

state, where the state was not, in contrast with Judaism,

an alien power but the political expression of the same

religion. But the conflict between state and religion took

different forms; in Christianity it appeared as the struggle

for political power on the part of a tightly organized

ecclesiastical hierarchy, and canon law was one of its

political weapons. Islamic law, on the other hand, was

never supported by an organized institution; consequently,

there never developed an overt trial of strength. There

54

**For the following question, consider each of the**

**choices separately and select all that apply**

3. The passage provides information to answer

which of the following questions EXCEPT?

A Does Islamic law depend on sources other

than Arab legal principles?

B What secular practices of Islamic states

conflicted with Islamic law?

C Is Jewish law more uniform than canon

law?

4. It can be inferred from the passage that the

application of Islamic law in Islamic states has

(A) systematically been opposed by groups who

believe it is contrary to their interests

(B) suffered irreparably from the lack of firm

institutional backing

(C) frequently been at odds with the legal

activity of government institutions

(D) remained unaffected by the political forces

operating alongside it

(E) benefited from the fact that it never

experienced a direct confrontation with

the state

55

5. Which of the following most accurately describes

the organization of the passage?

(A) A universal principle is advanced and then

discussed in relation to a particular

historical phenomenon.

(B) A methodological innovation is suggested

and then examples of its efficacy are

provided.

(C) A traditional interpretation is questioned

and then modified to include new data.

(D) A general opinion is expressed and then

supportive illustrations are advanced.

(E) A controversial viewpoint is presented and

then both supportive evidence and

contradictory evidence are cited.

6. The passage suggests that canon law differs

from Islamic law in that only canon law

(A) contains prescriptions that nonsacred legal

systems might regard as properly legal

(B) concerns itself with the duties of a person in

regard to the community as a whole

(C) was affected by the tension of the conflict

between religion and state

(D) developed in a political environment that

did not challenge its fundamental existence

(E) played a role in the direct confrontation

between institutions vying for power

If a supernova (the explosion of a massive star) trig-

gered star formation from dense clouds of gas and dust,

and if the most massive star to be formed from the cloud

evolved into a supernova and triggered a new round of

star formation, and so on, then a chain of star-forming

regions would result. If many such chains were created

in a differentially rotating galaxy, the distribution of

stars would resemble the observed distribute in a

spiral galaxy.

This line of reasoning underlies an exciting new

theory of spiral-galaxy structure. A computer simulation

based on this theory has reproduced the appearance of

many spiral galaxies without assuming an underlying

density wave, the hallmark of the most widely accepted

theory of the large-scale structure of spiral galaxies.

That theory maintains that a density wave of spiral

form sweeps through the central plane of a galaxy,

compressing clouds of gas and dust, which collapse

8. The passage implies that, according to the new

theory of spiral-galaxy structure, a spiral galaxy can

be created by supernovas when the supernovas are

(A) producing an underlying density wave

(B) affected by a density wave of spiral form

(C) distributed in a spiral pattern

(D) located in the central plane of a galaxy

(E) located in a differentially rotating galaxy

9. Which of the following, if true, would most

discredit the new theory as described in the passage?

(A)The exact mechanism by which a star becomes

a supernova is not yet completely known

and may even differ for different stars.

(B) Chains of star-forming regions like those

postulated in the new theory have been

observed in the vicinity of dense clouds of

gas and dust.

into stars that form a spiral pattern.

(160 words)

(C) The most massive stars formed from supernova

explosions are unlikely to evolve into super-

7. The primary purpose of the passage is to

(A) describe what results when a supernova triggers

the creation of chains of star-forming regions

(B) propose a modification in the most widely

accepted theory of spiral-galaxy structure

(C) compare and contrast the roles of clouds of gas

and dust in two theories of spiral-galaxy

structure

(D) describe a new theory of spiral-galaxy structure

and contrast it with the most widely accepted

theory

(E) describe a new theory of spiral-galaxy structure

and discuss a reason why it is inferior to the

most widely accepted theory

56

novas.

(D) Computer simulations of supernovas provide a

poor picture of what occurs just before a

supernova explosion.

(E) A density wave cannot compress clouds of gas

and dust to a density high enough to create a

star.

The fact that Black people in the English colonies of

North America were never treated as the equals of

White people has important ramifications. If from the

*Line* outset Black people were discriminated against, then

11. The passage suggests that the existence of a Roman

conception of slavery in Spanish and Portuguese

colonies had the effect of

(A) extending rather than causing racial

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legal slavery in the 1660‘s should be viewed as a

reflection and an extension of racial prejudice rather

than, as many historians including Oscar and Mary

Handlin have argued, the cause of prejudice. In

addition, the existence of discrimination before the

advent of legal slavery offers a further explanation for

the harsher treatment of Black slaves in North than in

South America. Freyre and Tannenbaum have rightly

argued that the lack of certain traditions in North

America—such as a Roman conception of slavery and

a Roman Catholic emphasis on equality—explains why

the treatment of Black slaves was more severe there

than in the Spanish and Portuguese colonies of South

America. But this cannot be the whole explanation

since it is merely negative, based only on a lack of

something. A more compelling explanation is that the

early and sometimes extreme racial discrimination in

the English colonies helped determine the particular

nature of the slavery that followed.

(192 words)

**For the following question, consider each of the**

**choices separately and select all that apply**

10. According to the passage, the Handlins have NOT

argued which of the following about the relationship

between racial prejudice and the institution of legal

slavery in the English colonies of North America?

A Racial prejudice and the institution of slavery

arose simultaneously.

B The source of racial prejudice was the

institution of slavery.

C Although existing in a lesser form before the

1660‘s, racial prejudice increased sharply after

slavery was legalized.

57

prejudice in these colonies

(B) hastening the legalization of slavery in

these colonies

(C) mitigating some of the conditions of slavery

for Black people in these colonies

(D) delaying the introduction of slavery into the

English colonies

(E) bringing about an improvement in the

treatment of Black slaves in the English

colonies

12. The author considers the explanation put forward

by Freyre and Tannenbaum for the treatment

accorded Black slaves in the English colonies of

North America to be

(A) ambitious but misguided

(B) valid but limited

(C) popular but suspect

(D) anachronistic and controversial

(E) premature and illogical

[*This page is intentionally left blank*. ]

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**Exercise 11**

Many critics of Eamily Bronte‘s novel *Wuthering*

*Heights* see its second part as a counterpoint that

comments on, if it does not reverse, the first part, where

2. Which of the following inferences about Henry

James‘s awareness of novelistic construction is

best supported by the passage?

*Line*

*5*

*10*

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*20*

a ―romantic‖ reading receives more confirmation. Seeing

the two parts as a whole is encouraged by the novel‘s

sophisticated structure, revealed in its complex use of

narrators and time shifts. Granted that the presence of

these elements need not argue an authorial awareness of

novelistic construction comparable to that of Henry

James, their presence does encourage attempts to unify

the novel‘s heterogeneous parts. However, any

interpretation that seeks to unify all of the novel‘s

diverse elements is bound to be somewhat

unconvincing. This is not because such an

interpretation necessarily stiffens into a thesis (although

rigidity in any interpretation of this or of any novel is

always a danger), but because *Wuthering Heights* has

recalcitrant elements of undeniable power that,

ultimately, resist inclusion in an all-encompassing

interpretation. In this respect, *Wuthering Heights* shares

a feature of *Hamlet.*

(164 words)

1. According to the passage, which of the following is

a true statement about the first and second parts of

*Wuthering Heights*?

(A) The second part has received more attention

from critics.

(B) The second part has little relation to the first part.

(C) The second part annuls the force of the first part.

(D) The second part provides less substantiation

for a ―romantic‖ reading.

(E)The second part is better because it is more realistic.

59

(A) James, more than any other novelist, was

aware of the difficulties of novelistic

construction.

(B) James was very aware of the details of novel-

istic construction.

(C) James‘s awareness of novelistic construction

derived from his reading of Bronte.

(D) James‘s awareness of novelistic construction

has led most commentators to see unity in

his individual novels.

(E) James‘s awareness of novelistic construction

precluded him from violating the unity of

his novels.

3. The author of the passage would be most likely to

agree that an interpretation of a novel should

(A) not try to unite heterogeneous elements in the

novel

(B) not be inflexible in its treatment of the elements

in the novel

(C) not argue that the complex use of narrators or

of time shifts indicates a sophisticated structure

(D) concentrate on those recalcitrant elements of

the novel that are outside the novel‘s main

structure

(E) primarily consider those elements of novelistic

construction of which the author of the novel

was aware

**For the following question, consider each of the**

**choices separately and select all that apply**

4. The author of the passage suggests which of the

following about *Hamlet*?

A *Hamlet* has usually attracted critical interpretations

that tend to stiffen into theses.

B *Hamlet* has elements that are not amenable

to an all-encompassing critical interpretation.

C *Hamlet* is less open to an all-encompassing

critical interpretation than is *Wuthering*

*Heights*.

The deep sea typically has a sparse fauna dominated

by tiny worms and crustaceans, with an even sparser

distribution of larger animals. However, near

*Line* hydrothermal vents, areas of the ocean where warm water

Nonetheless, advection is a more likely alternative

food source. Research has demonstrated that advective

*50* flow, which originates near the surface of the ocean

where suspended particulate matter accumulates,

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*35*

*40*

*45*

emerges from subterranean sources, live remarkable

densities of huge clams, blind crabs, and fish.

Most deep-sea faunas rely for food on particulate

matter, ultimately derived from photosynthesis, falling

from above. The food supplies necessary to sustain the

large vent communities, however, must be many times

the ordinary fallout. The first reports describing vent

faunas proposed two possible sources of nutrition:

bacterial chemosynthesis, production of food by bacteria

using energy derived from chemical changes, and

advection, the drifting of food materials from surrounding

regions. Later, evidence in support of the idea of intense

local chemosynthesis was accumulated: hydrogen sulfide

was found in vent water; many vent-site bacteria were

found to be capable of chemosynthesis; and extremely

large concentrations of bacteria were found in samples of

vent water thought to be pure. This final observation

seemed decisive. If such astonishing concentrations of

bacteria were typical of vent outflow, then food within the

vent would dwarf any contribution from advection.

Hence, the widely quoted conclusion was reached that

bacterial chemosynthesis provides the foundation for

hydrothermal-vent food chains—an exciting prospect

because no other communities on Earth are independent

of photosynthesis.

There are, however, certain difficulties with this

interpretation. For example, some of the large sedentary

organisms associated with vents are also found at

ordinary deep-sea temperatures many meters from the

nearest hydrothermal sources. This suggests that bacterial

chemosynthesis is not a sufficient source of nutrition for

these creatures. Another difficulty is that similarly dense

populations of large deep-sea animals have been found in

the proximity of ―smokers‖ –vents where water emerges

at temperatures up to 350°C. No bacteria can survive such

heat, and no bacteria were found there. Unless smokers

are consistently located near more hospitable warm-water

vents, chemosynthesis can account for only a fraction of

the vent faunas. It is conceivable, however, that these

large, sedentary organisms do in fact feed on bacteria that

grow in warm-water vents, rise in the vent water, and then

transports some of that matter and water to the vents.

Estimates suggest that for every cubic meter of vent

discharge, 350 milligrams of particulate organic

*55* material would be advected into the vent area. Thus, for

an average-sized vent, advection could provide more

than 30 kilograms of potential food per day. In addition,

it is likely that small live animals in the advected water

might be killed or stunned by thermal and/or chemical

*60* shock, thereby contributing to the food supply of vents.

(479 words)

rain in peripheral areas to nourish animals living some

distance from the warm-water vents.

60

**For the following question, consider each of the**

**choices separately and select all that apply**

5. The passage provides information for answering

which of the following questions EXCEPT?

A What causes warm-water vents to form?

B What role does hydrogen sulfide play in

chemosynthesis?

C Do bacteria live in the vent water of smokers?

6. The information in the passage suggests that the

majority of deep-sea faunas that live in nonvent

habitats have which of the following characteristics?

(A) They do not normally feed on particles of food

in the water.

(B) They are smaller than many vent faunas.

(C) They are predators.

(D) They derive nutrition from a chemosynthetic

food source.

(E) They congregate around a single main food

source.

61

7. Select the sentence in the passage in which the author

implies that vents are colonized by some of the same

animal found in other areas of the ocean floor, which

might be a weakness for the bacterial chemosynthesis

model.

8. The author refers to ―smokers‖ in the third paragraph

most probably in order to

(A) show how thermal shock can provide food for

some vent faunas by stunning small animals

(B) prove that the habitat of most deep-sea animals is

limited to warm-water vents

(C) explain how bacteria carry out chemosynthesis

(D) demonstrate how advection compensates for the

lack of food sources on the seafloor

(E) present evidence that bacterial chemosynthesis

may be an inadequate source of food for

some vent faunas

Ragtime is a musical form that synthesizes folk

melodies and musical techniques into a brief quadrille-

like structure, designed to be played—exactly as written

*Line* —on the piano. A strong analogy exists between

9. Which of the following is most nearly analogous in

source and artistic character to a ragtime composition

as described in the passage?

*5*

*10*

European composers like Ralph Vaughan Williams,

Edward Grieg, and Anton Dvorak who combined folk

tunes and their own original materials in larger

compositions and the pioneer ragtime composers in the

United States. Composers like Scott Joplin and James

Scott were in a sense collectors or musicologists,

collecting dance and folk music in Black communities

and consciously shaping it into brief suites or

anthologies called piano rags.

(100 words)

62

(A) Symphonic music derived from complex jazz

motifs

(B) An experimental novel based on well-known

cartoon characters

(C) A dramatic production in which actors invent

scenes and improvise lines

(D) A ballet whose disciplined choreography is

based on folk-dance steps

(E) A painting whose abstract shapes evoke

familiar objects in a natural landscape

Geologists have long known that the Earth‘s mantle

is heterogeneous, but its spatial arrangement remains

unresolved—is the mantle essentially layered or irregu-

larly heterogeneous? The best evidence for the layered-

mantle thesis is the well-established fact that volcanic

rocks found on oceanic islands, islands believed to

result from mantle plumes arising from the lower

mantle, are composed of material fundamentally

different from that of the midocean ridge system,

whose source, most geologists contend, is the upper

mantle.

Some geologists, however, on the basis of obser-

vations concerning mantle xenoliths, argue that the

mantle is not layered, but that heterogeneity is created

by fluids rich in ―incompatible elements‖ (elements

tending toward liquid rather than solid state)

percolating upward and transforming portions of the

upper mantle irregularly, according to the vagaries of

the fluids‘ pathways. We believe, perhaps

unimaginatively, that this debate can be resolved

through further study, and that the underexplored

midocean ridge system is the key.

(157 words)

63

10. According to the passage, it is believed that oceanic

islands are formed from

(A) the same material as mantle xenoliths

(B) the same material as the midocean ridge system

(C) volcanic rocks from the upper mantle

(D) incompatible elements percolating up from the

lower mantle

(E) mantle plumes arising from the lower mantle

**For the following question, consider each of the**

**choices separately and select all that apply**

11. It can be inferred from the passage that the sup-

porters of the ―layered-mantle‖ theory believe which

of the following?

A The volcanic rocks on oceanic islands are

composed of material derived from the

lower part of the mantle.

B The materials of which volcanic rocks on

oceanic islands and midocean ridges are

composed are typical of the layers from

which they are thought to originate.

C The differences in composition between

volcanic rocks on oceanic islands and the

midocean ridges are a result of different

concentrations of incompatible elements.

12. In the context of the passage, ―unimaginatively‖ is

closest in meaning to

(A) pedestrian

(B) controversial

(C) unrealistic

(D) novel

(E) paradoxical

Scientists have sought evidence of long-term solar

periodicities by examining indirect climatological data,

such as fossil records of the thickness of ancient tree rings.

These studies, however, failed to link unequivocally

terrestrial climate and the solar-activity cycle, or even to

confirm the cycle's past existence.

(45 words)

64

13. It can be inferred from the passage that studies

attempting to use tree-ring thickness to locate possible

links between solar periodicity and terrestrial climate

are based on which of the following assumptions?

(A) The solar-activity cycle existed in its present form

during the time period in which the tree rings grew.

(B) The biological mechanisms causing tree growth

are unaffected by short-term weather pat terns.

(C) Average tree-ring thickness varies from species

to species.

(D) Tree-ring thicknesses reflect changes in terrestrial

climate.

(E) Both terrestrial climate and the solar-activity

cycle randomly affect tree-ring thickness.

**Exercise 12**

Traditional research has confronted only Mexican

and United States interpretations of Mexican-American

culture. Now we must also examine the culture as we

*Line* Mexican Americans have experienced it, passing from

2. The author most probably uses the phrase

―charter minority‖ (lines 6-7) to reinforce the

idea that Mexican Americans

(A) are a native rather than an immigrant group

*5*

*10*

*15*

*20*

a sovereign people to compatriots with newly arriving

settlers to, finally, a conquered people—a charter

minority on our own land.

When the Spanish first came to Mexico, they inter-

married with and absorbed the culture of the indigenous

Indians. This policy of colonization through acculturation

was continued when Mexico acquired Texas in the early

1800‘s and brought the indigenous Indians into Mexican

life and government. In the 1820‘s, United States citizens

migrated to Texas, attracted by land suitable for cotton.

As their numbers became more substantial, their policy of

acquiring land by subduing native populations began to

dominate. The two ideologies clashed repeatedly,

culminating in a military conflict that led to victory for

the United States. Thus, suddenly deprived of our parent

culture, we had to evolve uniquely Mexican-American

modes of thought and action in order to survive.

(168 words)

1. The author‘s purpose in writing this passage is

primarily to

(A) suggest the motives behind Mexican and United

States intervention in Texas

(B) document certain early objectives of Mexican-

American society

(C) provide a historical perspective for a new analysis

of Mexican-American culture

(D) appeal to both Mexican and United States

scholars to give greater consideration to

economic interpretations of history

(E) bring to light previously overlooked research on

Mexican Americans

65

in the United States

(B) played an active political role when Texas first

became part of the United States

(C) recognized very early in the nineteenth century

the need for official confirmation of their

rights of citizenship

(D) have been misunderstood by scholars trying

to interpret their culture

(E) identify more closely with their Indian heritage

than with their Spanish heritage

3. Which of the following statements most clearly

contradicts the information in this passage?

(A) In the early 1800‘s, the Spanish committed more

resources to settling California than

to developing Texas.

(B) While Texas was under Mexican control, the

population of Texas quadrupled, in spite of the

fact that Mexico discouraged immigration

from the United States.

(C) By the time Mexico acquired Texas, many

Indians had already married people of

Spanish heritage.

(D) Many Mexicans living in Texas returned to

Mexico after Texas was annexed by the

United States.

(E) Most Indians living in Texas resisted Spanish

acculturation and were either killed or

enslaved.

The determination of the sources of copper ore used in

composition as the lead in the copper ore. Lead isotope

the manufacture of copper and bronze artifacts of Bronze

Age civilizations would add greatly to our knowledge of

*Line* cultural contacts and trade in that era. Researchers have

*5*

analyzed artifacts and ores for their concentrations of elements,

but for a variety of reasons, these studies have generally failed

to provide evidence of the sources of the copper used in the

objects. Elemental composition can vary within the same

copper-ore lode, usually because of varying admixtures of

*10*

other elements, especially iron, lead, zinc, and arsenic. And

high concentrations of cobalt or zinc, noticed in some artifacts,

appear in a variety of copper-ore sources. Moreover, the

processing of ores introduced poorly controlled changes

in the concentrations of minor and trace elements in the

*15*

resulting metal. Some elements evaporate during smelting

and roasting; different temperatures and processes produce

different degrees of loss. Finally, flux, which is sometimes

added during smelting to remove waste material from the

ore, could add quantities of elements to the final product.

*20*

An elemental property that is unchanged through these

chemical processes is the isotopic composition of each

metallic element in the ore. Isotopic composition, the

percentages of the different isotopes of an element in a given

sample of the element, is therefore particularly suitable as an

*25*

indicator of the sources of the ore. Of course, for this purpose

it is necessary to find an element whose isotopic composition

is more or less constant throughout a given ore body, but

varies from one copper ore body to another or, at least, from

one geographic region to another.

*30*

The ideal choice, when isotopic composition is used to

investigate the source of copper ore, would seem to be copper

itself. It has been shown that small but measurable variations

occur naturally in the isotopic composition of copper.

However, the variations are large enough only in rare

*35*

ores; between samples of the common ore minerals of copper,

isotopic variations greater than the measurement error have

not been found. An alternative choice is lead, which occurs

in most copper and bronze artifacts of the Bronze Age in

amounts consistent with the lead being derived from the

*40*

copper ores and possibly from the fluxes. The isotopic

composition of lead often varies from one source of

common copper ore to another, with variations exceeding

the measurement error; and preliminary studies indicate

virtually uniform isotopic composition of the lead from a

*45*

single copper-ore source. While some of the lead found in

an artifact may have been introduced from flux or when

other metals were added to the copper ore, lead so added in

Bronze Age processing would usually have the same isotopic

66

*50*

studies may thus prove useful for interpreting the

archaeological record of the Bronze Age.

(473 words)

4. The author first mentions the addition of flux during

smelting in the last sentence in the last paragraph in

order to

(A) give a reason for the failure of elemental

composition studies to determine ore sources

(B) illustrate differences between various Bronze

Age civilizations

(C) show the need for using high smelting

temperatures

(D) illustrate the uniformity of lead isotope

composition

(E) explain the success of copper isotope

composition analysis

**For the following question, consider each of the**

**choices separately and select all that apply**

5. According to the passage, possible sources of the

lead found in a copper or bronze artifact include

which of the following?

A The copper ore used to manufacture the artifact

B Flux added during processing of the copper ore

C Other metal added during processing of the

copper ore

67

6. Select the sentence in the passage that the author

rejects copper as the ―ideal choice‖.

7. It can be inferred from the passage that the use

of flux in processing copper ore can alter the

lead isotope composition of the resulting metal

EXCEPT when

(A) there is a smaller concentration of lead in

the flux than in the copper ore

(B) the concentration of lead in the flux is

equivalent to that of the lead in the ore

(C) some of the lead in the flux evaporates

during processing

(D) any lead in the flux has the same isotopic

composition as the lead in the ore

(E) other metals are added during processing

Echolocating bats emit sounds in patterns—

characteristic of each species—that contain both

frequency-modulated (FM) and constant-frequency (CF)

*Line* signals. The broadband FM signals and the narrowband

8. According to the passage, the information provided

to the bat by CF echoes differs from that provided

by FM echoes in which of the following ways?

(A) Only CF echoes alert the bat to moving targets.

*5*

*10*

*15*

CF signals travel out to a target, reflect from it, and

return to the hunting bat. In this process of transmission

and reflection, the sounds are changed, and the changes

in the echoes enable the bat to perceive features of the

target.

The FM signals report information about target

characteristics that modify the timing and the fine

frequency structure, or spectrum, of echoes—for

example, the target‘s size, shape, texture, surface

structure, and direction in space. Because of their narrow

bandwidth, CF signals portray only the target‘s presence

and, in the case of some bat species, its motion relative to

the bat‘s. Responding to changes in the CF echo‘s

frequency, bats of some species correct in flight for the

direction and velocity of their moving prey.

(150 words)

68

(B) Only CF echoes identify the range of widely

spaced targets.

(C) Only CF echoes report the target‘s presence to

the bat.

(D) In some species, CF echoes enable the bat to

judge whether it is closing in on its target.

(E) In some species, CF echoes enable the bat to

discriminate the size of its target and the

direction in which the target is moving.

9. Which of the following best describes the organization

of the passage?

(A) A fact is stated, a process is outlined, and

specific details of the process are described.

(B) A fact is stated, and examples suggesting that

a distinction needs correction are considered.

(C) A fact is stated, a theory is presented to explain

that fact, and additional facts are introduced

to validate the theory.

(D) A fact is stated, and two theories are compared

in light of their explanations of this fact.

(E) A fact is stated, a process is described, and

examples of still another process are

illustrated in detail.

By far the most outstanding of American talented

women sculptors during the twentieth century is Louise

Nevelson, who in the eyes of many critics is the most

original female artist alive today. One famous and

influential critic, Hilton Kramer, said of her work, ―For

myself, I think Ms. Nevelson succeeds where the

painters often fail.‖

(55 words)

69

10. The author quotes Hilton Kramer most probably in

order to illustrate which of the following?

(A) The realism of Nevelson‘s work

(B) The unique qualities of Nevelson‘s style

(C) The extent of critical approval of Nevelson‘s

work

(D) A distinction between sculpture and painting

(E) A reason for the prominence of women

sculptors since the 1950‘s

Until about five years ago, the very idea that peptide

hormones might be made anywhere in the brain besides

the hypothalamus was astounding. But laboratory after

*Line* laboratory found that antiserums to peptide hormones,

11. Which of the following titles best summarizes the

passage?

(A) Is Molecular Biology the Key to Understanding

Intercellular Communication in the Brain?

*5*

*10*

*15*

*20*

when injected into the brain, bind in places other than

the hypothalamus, indicating that either the hormones

or substances that cross-react with the antiserums are

present. The immunological method of detecting

peptide hormones by means of antiserums, however, is

imprecise. Cross-reactions are possible and this method

cannot determine whether the substances detected by

the antiserums really are the hormones, or merely close

relatives. Furthermore, this method cannot be used to

determine the location in the body where the detected

substances are actually produced. New techniques of

molecular biology, however, provide a way to answer

these questions. It is possible to make specific

complementary DNA‘s (cDNA‘s) that can serve as

molecular probes to seek out the messenger RNA‘s

(mRNA‘s) of the peptide hormones. The brain cells

containing these mRNA‘s can then be isolated and their

mRNA‘s decoded to determine just what their protein

products are and how closely the products resemble the

true peptide hormones.

(187 words)

70

(B) Molecular Biology: Can Researchers Exploit

Its Techniques to Synthesize Peptide Hormones?

(C) The Advantages and Disadvantages of the

Immunological Approach to Detecting

Peptide Hormones

(D) Peptide Hormones: How Scientists Are

Attempting to Solve Problems of Their

Detection

(E) Peptide Hormones: The Role Played by

Messenger RNA‘s in Their Detection

12. The passage suggests that a substance detected in the

brain by use of antiserums to peptide hormones may

(A) have been stored in the brain for a long period

of time

(B) play no role in the functioning of the brain

(C) have been produced in some part of the body

other than the brain

(D) have escaped detection by molecular methods

(E) play an important role in the functioning of the

hypothalamus

13. Which of the following is mentioned in the passage

as a drawback of the immunological method of

detecting peptide hormones?

(A) It cannot be used to detect the presence of

growth regulators in the brain.

(B) It cannot distinguish between the peptide

hormones and substances that are very

similar to them.

(C) It uses antiserums that are unable to cross

the blood-brain barrier.

(D) It involves a purification process that requires

extensive training in endocrinology.

(E) It involves injecting foreign substances directly

into the bloodstream.

**Exercise 13**

Biologists have long maintained that two groups of

pinnipeds, sea lions and walruses, are descended from

a terrestrial bearlike animal, whereas the remaining

*Line* group, seals, shares an ancestor with weasels. But the

1. The author implies that which of the following was part

of the long-standing view concerning pinnipeds?

A Pinnipeds are all descended from a terrestrial

bearlike animal.

*5*

*10*

*15*

*20*

recent discovery of detailed similarities in the skeletal

structure of the flippers in all three groups undermines

the attempt to explain away superficial resemblance as

due to convergent evolution—the independent develop-

ment of similarities between unrelated groups in

response to similar environmental pressures. Flippers

may indeed be a necessary response to aquatic life,

turtles, whales, and dugongs also have them. But the

common detailed design found among the pinnipeds

probably indicates a common ancestor. Moreover,

walruses and seals drive themselves through the water

with thrusts of their hind flippers, but sea lions use

their front flippers. If anatomical similarity in the

flippers resulted from similar environmental pressures,

as posited by the convergent-evolution theory, one

would expect walruses and seals, but not seals and sea

B Pinnipeds share a common ancestor with turtles,

whales, and dugongs

C Similarities among pinnipeds are due to their all

having had to adapt to aquatic life.

2. The author implies which of the following about the

fact that turtles, whales, and dugongs all have flippers?

A It can be explained by the hypothesis that turtles,

whales, and dugongs are very closely related.

B It can be explained by the idea of convergent

evolution.

C It suggests that turtles, whales, and dugongs

evolved in separate parts of the world

D It undermines the view that turtles, whales, and

dugongs are all descended from terrestrial ancestors.

E It is the primary difference between turtles, whales,

lions, to have similar flippers.

(162 words)

71

and dugongs, on the one hand, and pinnipeds, on

the other.

3. Select the sentence in the passage in which the author

shows that the implication of the common view is

contradicted by a new finding.

**Question 4 is based on the following reading passage.**

According to astronomer S.A. Phinney, kicking a rock

hard enough to free it from Earth's gravity would require

a meteorite capable of making a crater more than 60 miles

across. Moreover, even if Earth rocks were freed by

meteorite impact, Mars's orbit is much larger than Earth's,

so Phinney estimates that the probability of these rocks

hitting Mars is about one-tenth as great as that of Mars's

rocks hitting Earth. To demonstrate this estimate, Phinney

used a computer to calculate where 1,000 hypothetical

particles would go if ejected from Earth in random

directions. He found that 17 of the 1,000 particles would

hit Mars.

72

4. Which of the following, if true, would cast most

doubt on Phinney's estimate of the probability of

Earth rocks hitting Mars?

A Rather than going in random directions, about

25 percent of all particles ejected from Earth

go in the same direction into space.

B Approximately 100 meteorites large enough to

make a noticeable crater hit the Earth each year.

C No rocks of Earth origin have been detected

on Mars.

D The velocity of rocks escaping from Earth's gravity is

lower than the velocity of meteorites hitting the Earth.

E No craters more than 60 miles across have

been found on Mars.

[*This page is intentionally left blank*. ]

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**For each of Questions 5-8, select one answer choice**

**unless otherwise instructed.**

**Questions 5 to 8 are based on the following reading**

**passage.**

Present-day philosophers usually envision their

discipline as an endeavor that has been, since antiquity,

distinct from and superior to any particular intellectual

*Line* discipline such as theology or science. The basis for this

*35*

nineteenth century. Without the idea of epistemology, the

survival of philosophy in an age of modern science is

hard to imagine. Metaphysics, philosophy‘s traditional

core—considered as the most general description of how

*5*

view, however, lies in a serious misinterpretation of the

40

the heavens and the earth are put together—had been

past, a projection of modern concerns onto past events.

The idea of an autonomous discipline called ―philosophy,‖

distinct from and sitting in judgment on such pursuits as

theology and science turns out, on close examination, to

rendered almost completely meaningless by the

spectacular progress of physics. Kant, however, by

focusing philosophy on the problem of knowledge,

managed to replace metaphysics with epistemology, and

*10*

*15*

be of quite recent origin. When, in the seventeenth

century, Descartes and Hobbes rejected medieval

philosophy, they did not think of themselves, as modern

philosophers do, as proposing a new and better

philosophy, but rather as furthering ―the warfare between

science and theology.‖ They were fighting, albeit

45

thus to transform the notion of philosophy as ―queen of

sciences‖ into the new notion of philosophy as a separate,

foundational discipline: philosophy became ―primary‖ no

longer in the sense of ―highest‖ but in the sense of

―underlying‖.

discreetly, to open the intellectual world to the new

science and to liberate intellectual life from ecclesiastical

philosophy and envisioned their work as contributing to

the growth, not of philosophy, but of research in

*20*

*25*

*30*

mathematics and physics. This link between philosophical

interests and scientific practice persisted until the

nineteenth century, when decline in ecclesiastical power

over scholarship and changes in the nature of science

provoked the final separation of philosophy from both.

The demarcation of philosophy from science was

facilitated by the development in the early nineteenth

century of a new notion, that philosophy‘s core interest

should be epistemology, the general explanation of what

it means to know something. Modern philosophers now

trace that notion back at least to Descartes and Spinoza,

but it was not explicitly articulated until the late

eighteenth century, by Kant, and did not become built into

the structure of academic institutions and the standard

self-descriptions of philosophy professors until the late

74

5. Which of the following best expresses the author‘s

main point?

A Philosophy‘s overriding interest in basic human

questions is a legacy primarily of the work of Kant.

B Philosophy was deeply involved in the seventeenth-

century warfare between science and religion.

C The set of problems of primary importance to

philosophers has remained relatively constant since

antiquity.

D The status of philosophy as an independent

intellectual pursuit is a relatively recent development.

E The role of philosophy in guiding intellectual

speculation has gradually been usurped by science.

**For the following question, consider each of the**

**choices separately and select all that apply**

6. The author of the passage implies which of the

following in discussing the development of philosophy

during the nineteenth century EXCEPT?

A Nineteenth-century philosophy took science as its

model for understanding the bases of knowledge.

B Nineteenth-century philosophers carried out a

program of investigation explicitly laid out by

Descartes and Spinoza.

C Kant had an overwhelming impact on the direction of

nineteenth-century philosophy.

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7. Select the sentence in the passage in which the author

characterizes Descartes‘ support for the new science of

the seventeenth century.

**For the following question, consider each of the**

**choices separately and select all that apply**

8. With which of the following statements concerning the

writing of history would the author of the passage be

most likely to agree?

A History should not be distorted by attributing

present-day consciousness to historical figures.

B History should be concerned with describing those

aspects of the past that differ most from those of the

present.

C History should not emphasize the role played by

ideas over the role played by individuals.

**Question 9 is based on the following reading passage.**

Although recent years have seen substantial reductions

in noxious pollutants from individual motor vehicles,

the number of such vehicles has been steadily

increasing. Consequently, more than 100 cities in the

United States still have levels of carbon monoxide,

particulate matter, and ozone (generated by

photochemical, reactions with hydrocarbons from vehicle

exhaust) that exceed legally established limits.

76

9.Which of the following most closely parallels the

situation described in the first sentence of the

passage?

A Although a town reduces its public services in

order to avoid a tax increase, the town's tax

rate exceeds that of other towns in the

surrounding area.

B Although a state passes strict laws to limit the

type of toxic material that can be disposed of

in public landfills, illegal dumping continues

to increase.

C Although a town's citizens reduce their individual

use of water, the town's water supplies

continue to dwindle because of a steady

increase in the total population of the town.

D Although a country attempts to increase the

sale of domestic goods by adding a tax to the

price of imported goods, the sale of imported

goods within the country continues to

increase.

E Although a country reduces the speed limit on

its national highways, the number of fatalities

caused by automobile accidents continues to

increase.

**Questions 10 to 12 are based on the following reading**

**passage**

Hank Morgan, the hero of Mark Twain's *A Connecticut*

*Yankee in King Arthur's Court,* is a nineteenth-century

master mechanic who mysteriously awakening in

*Line* sixth-century Britain, launches what he hopes will be a

**For the following question, consider each of the**

**choices separately and select all that apply**

11. It can be inferred from the passage that Mark Twain

would most probably have believed in which of the

following statements about societal change?

A Technological advancements are limited in their

*5*

*10*

*15*

*20*

peaceful revolution to transform Arthurian Britain into an

industrialized modern democracy. The novel, written as a

spoof of Thomas Malory's *Morte d'Arthur*, a popular

collection of fifteenth-century legends about

sixth-century Britain, has been made into three upbeat

movies and two musical comedies. None of these

translations to screen and stage, however, dramatize the

anarchy at the conclusion of *A Connecticut Yankee*, which

ends with the violent overthrow of Morgan's

three-year-old progressive order and his return to the

nineteenth century, where he apparently commits suicide

after being labeled a lunatic for his incoherent babblings

about drawbridges and battlements. The American public,

although enjoying Twain's humor, evidently rejected his

cynicism about technological advancement and change

through peaceful revolution as antithetical to the United

States doctrine of progress.

10.According to the passage, which of the following is a

true statement about the reception of *A Connecticut*

*Yankee in King Arthur's Court* by the American public?

A The public had too strong a belief in the doctrine of

progress to accept the cynicism demonstrated at the

conclusion of Twain's novel.

B Twain's novel received little public recognition until

the work was adapted for motion pictures and plays.

C Although the public enjoyed Twain's humor, his use

of both sixth-century and nineteenth-century

characters confused many people.

D The public has continued to enjoy Twain's story, but

the last part of the novel seems too violent to

American minds.

E Because of the cynicism at the end of the book, the

public rejected Twain's work in favor of the work of

Thomas Malory.

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ability to change society and will likely bring

liabilities along with any potential benefits.

B The belief in the unmitigated benefits of societal

change is antithetical to the American

doctrine of progress.

C Technological advances and peaceful revolutions,

although sometimes accompanied by

unintended violence and resistance to societal

change, eventually lead to a more progressive order.

12.The author uses the examples of "three upbeat

movies and two musical comedies"(lines 9-10)

primarily in order to demonstrate that

A well-written novels like *A Connecticut Yankee in*

*King Arthur's Court*, regardless of their tone or theme,

can be translated to the stage and screen.

B the American public has traditionally been

more interested in watching plays and movies

than in reading novels like *A Connecticut*

*Yankee in King Arthur's Court*

C Twain's overall message in *A Connecticut*

*Yankee in King Arthur's Court* is one that

had a profound impact on the American public.

D Twain's *A Connecticut Yankee in King Arthur's*

*Court* has been a more popular version of the

Arthurian legends than has Malory's *Morte d'Arthur*

E *A Connecticut Yankee in King Arthur's Court*

has been accepted as an enjoyable and humorous tale

in versions that have omitted the anarchy at the

novel's conclusion

**Exercise 14**

**For each of Questions 1-3, select one answer choice**

**unless otherwise instructed.**

**Questions 1 to 3 are based on the following reading**

**For the following question, consider each of the**

**choices separately and select all that apply**

**passage**.

1.

It can be inferred that the author of the passage

would describe *Brown Girl, Brownstones* as being

Paule Marshall's *Brown Girl, Brownstones* (1959) was

a landmark in the depiction of female characters in Black

American literature. Marshall avoided the oppressed and

*Line* tragic heroine in conflict with White society that had been

A highly influenced by novels written in the early

twentieth century

B important in the late 1950's but dated today

C an important influence on novels written in

*5*

*10*

*15*

typical of the protest novels of early twentieth century.

Like her immediate predecessors, Zora Neale Hurston

and Gwendolyn Brooks, she focused her novel on an

ordinary Black woman's search for identity within the

context of a Black community. But Marshall extended the

analysis of Black female characters begun by Hurston and

Brooks by depicting her heroine's development in terms

of the relationship between her Barbadian American

parents, and by exploring how male and female roles

were defined by their immigrant culture, which in turn

was influenced by the materialism of White America. By

placing characters within a wider cultural context,

Marshall attacked racial and sexual stereotypes and paved

the way for explorations of race, class, and gender in the

the1970's

2. According to the passage, Hurston, Brooks, and

Marshall are alike in that they

A did not examine the effects of White culture on

their characters' lives

B were heavily influenced by the protest novels of

the early twentieth century

C used Black communities as the settings for their

novels.

D wrote primarily about the difficulties their char-

acters encountered in White culture

E wrote exclusively about female characters and

the experiences of women

novels of the 1970's.

3. The author‘s description of the way in which

Marshall depicts her heroine's development is most

probably intended to

A continue the discussion of similarities in the

works of Brooks, Hurston, and Marshall

B describe the specific racial and sexual stereo-

types that Marshall attacked

C contrast the characters in Marshall's novels

with those in later works

D show how Marshall extends the portrayal of

character initiated by her predecessors

E compare themes in Marshall's early work with

themes in her later novels

78

**Question 4 is based on the following reading passage.**

Calculations of the density of alloys based on

Bernal-type models of the alloy‘s metal component

agreed fairly well with the experimentally determined

4. The author's speculation about the appropriateness

of models using spheres of two sizes for binary

alloys would be strongly supported if models using

*Line*

*5*

*10*

values from measurements on alloys consisting of a

noble metal together with a metalloid, such as alloys of

palladium and silicon, or alloys consisting of iron,

phosphorus, and carbon, although small discrepancies

remained. One difference between real alloys and the

hard spheres used in Bernal models is that the

components of an alloy have different sizes, so that

models based on two sizes of spheres are more

appropriate for a binary alloy, for example. The smaller

metalloid atoms of the alloy might fit into holes in the

dense, random-packed structure of the larger metal

atoms.

79

spheres of two sizes yielded

A values for density identical to values yielded by

one-sphere models using the smaller spheres

only

B values for density agreeing nearly perfectly with

experimentally determined values

C values for density agreeing nearly perfectly with

values yielded by models using spheres of

three sizes

D significantly different values for density depending

on the size ratio between the two kinds of spheres

used

E the same values for density as the values for

appropriately chosen models that use only

medium-sized spheres

**Questions 5 and 6 are based on the following reading**

**passage**.

One of the principal themes of Walzer's critique of liberal

capitalism is that it is insufficiently egalitarian. Walzer's

case against the economic inequality generated by

*Line* capitalism and in favor of "a radical redistribution of

**For the following question, consider each of the**

**choices separately and select all that apply**

5.The passage provides sufficient information to

answer which of the following questions EXCEPT?

A What weight in relation to other qualities

5

*10*

*15*

*20*

wealth" is presented in a widely cited essay entitled "In

Defense of Equality." The most striking feature of

Walzer's critique is that, far from rejecting the principle of

reward according to merit, Walzer insists on its validity.

People who excel should receive the superior

benefits appropriate to their excellence. But people

exhibit a great variety of qualities—"intelligence,

physical strength, agility and grace, artistic creativity,

mechanical skill, leadership, endurance, memory,

psychological insight, the capacity for hard

work—even moral strength, sensitivity, the ability to

express compassion."Each deserves its proper

recompense, and hence a proper distribution of material

goods should reflect human differences as measured on

all these different scales. Yet, under capitalism, the ability

to make money ("the green thumb of bourgeois society")

enables its possessor to acquire almost "every other sort

of social good," such as the respect and esteem of others.

80

should a quality like sensitivity have,

according to Walzer, in determining the

proper distribution of goods?

B Which quality does Walzer deem too highly

valued under liberal capitalism?

C Which are the social goods that are, according

to Walzer, outside the reach of the power of

money?

6. The author implies that Walzer's interpretation of

the principle of reward according to merit is

distinctive for its

A insistence on maximizing everyone's rewards

B emphasis on equality

C proven validity

D broad conception of what constitutes merit

E broad conception of what constitutes a reward

**Questions 7 to 9 are based on the following reading**

**passage**.

National character is not formally considered by

7. The author's main point in the passage is that

national character

social scientists in discussing economic and social

development today. They believe that people differ and

*Line* that these differences should be taken into account

A

B

is too elusive to merit attention by anthropologists

and other social scientists.

is of greater interest to social scientists today

*5*

somehow, but they have as yet discovered no way to

than it has been in the past.

include such variables in their formal models of economic

and social development. The difficulty lies in the

nature of the data that supposedly define different

national characters. Anthropologists and others are on

C

D

is still too difficult to describe with the precision

required by many social scientists.

has become increasingly irrelevant because of

the complexity of modern lift.

*10*

much firmer ground when they attempt to describe the

cultural norms for a small homogeneous tribe or village

E

can be described more accurately by anthropologists

than by other social scientists.

than when they undertake the formidable task of discovering

the norms that exist in a complex modern

nation-state composed of many disparate groups. The

**For the following question, consider each of the**

**choices separately and select all that apply**

*15*

situation is further complicated by the nature of judgments

about character; since such judgments are overly

dependent on impressions and since, furthermore,

impressions are usually stated in qualitative terms, it is

impossible to make a reliable comparison between the

national characters of two countries.

81

8. It can be inferred from the passage that the social

scientists mentioned in the first two sentences would

agree with which of the following statements?

A It is extremely difficult to create models that account

for both economic and social development

B Models of economic and social development would

be improved by the inclusion of adequate

descriptions of national character.

C it is important to supplement formal models of

economic and social development with qualitative

impressions of national character.

9. Which of the following best describes the organization

of the passage?

AA problem is presented and reasons for its existence

are supplied.

B A controversial view is presented and evidence

for its validity is supplied.

C A hypothesis is presented and possible means

of verifying it are suggested.

D A recent development is described and then

analyzed.

E A dispute is summarized and one side defended.

**Questions 10 and 11 are based on the following**

**reading passage**.

It is now established that the Milky Way is far more

extended and of much greater mass than was hitherto

thought. However, all that is visible of the constituents of

the Milky Way's corona (outer edge), where much of the

galaxy's mass must be located, is a tiny fraction of the

corona's mass. Thus, most of the Milky Way's outlying

matter must be dark.

Why? Three facts are salient. First, dwarf galaxies

and globular clusters, into which most of the stars of the

Milky Way's corona are probably bound, consist mainly

of old stars. Second, old stars are not highly luminous.

Third, no one has detected in the corona the clouds of

gaseous matter such as hydrogen and carbon monoxide

that are characteristic of the bright parts of a galaxy.

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10. The passage as a whole is primarily concerned with

(A) analyzing a current debate

(B) criticizing a well-established theory

(C) showing how new facts support a previously

dismissed hypothesis

(D) stating a conclusion and adducing evidence that

may justify it

(E) contrasting two types of phenomena and

showing how they are related

11. Select the sentence that the author implicitly indicates

what astronomers believed about the Milky way until

fairly recently.

**Question 12 is based on the following reading passage.**

In electrides, the anions (negative ions) are

completely replaced by electrons, which are trapped in

naturally formed cavities within a framework of regularly

stacked cations (positive ions). Unlike other types of

anions, anionic electrons do not behave as if they were

simple charged spheres. The properties of an electride

depend largely on the distance between the cavities that

hold trapped electrons. When the trapped electrons are far

apart, they do not interact strongly, and so behave

somewhat like an array of isolated negative charges.

When they are closer together, they begin to display

properties associated with large ensembles of identical

particles. When they are still closer, the ensemble

properties dominate and the electrons "delocalize".

83

12. It can be inferred from the passage that an electride

behaves most like a normal ionic crystal when the

electride has which of the following features?

(A) The anionic cavities are widely separated.

(B) All of the trapped electrons are able to delocalize.

(C) The trapped electrons are liberated by

impinging photons.

(D) The ions are tightly packed together.

(E) Most of the cations have lost their electrical

charge.

**Exercise 15**

**Questions 1 to 3 are based on the following reading**

**passage**.

1. Select the sentence that is used as evidence that

workers worker bees are capable of thwarting each

other's attempts to reproduce.

Typically the queen honeybee is mother to all the bees

in a hive; after mating with several male drones from

other colonies, she lays fertilized eggs that develop into

*Line* all-female worker bees and lays unfertilized eggs that

2. The inner workings in a honeybee hive that regulate

reproduction, as they are described in the passage,

are most similar to which of the following

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become all-male drones. According to natural selection

theory, a worker would enhance her fitness --or ability to

propagate her genes-by hatching her own eggs in addition

to or in place of the queen's. But a typical worker's fitness

would be diminished if other workers' sons, who have

less genetic material in common with the worker,

supplanted the queen's sons (the worker's brothers).

Researchers, testing the hypothesis that workers usually

somehow block each other's attempts to reproduce, put

unfertilized eggs laid by workers and by the queen into a

hive. Other workers quickly devoured the workers' eggs

while leaving the queen's eggs alone.

84

types of human societies?

(A) A totalitarian society in which citizens'

"policing" of each other's actions helps to

maintain the status quo.

(B) A pacifist state in which the individuals are

strongly opposed to the use of violence or

aggression to settle disputes.

(C) A democratic society in which the voice of the

majority rules.

(D) A parliamentary society in which a few members,

organized as a cabinet wield executive power.

(E) An anarchic state in which order and stable

social structures are lacking

3. The passage best supports which of the following

inferences about the fitness of honeybees?

(A) Reproduction diminishes any individual

honey-bee's fitness.

(B) An individual worker's fitness can be maintained

without the individual herself reproducing.

(C) A hierarchy of stronger and weaker

individuals among the worker bees

determines which individuals will reproduce

when a queen dies.

(D) While a queen reigns, the fitness of the

worker bees is increased and that of the

drones is diminished.

(E) Fitness encourages worker bees to hatch

honeybee eggs without regard for the

relatedness of the young to the "parent".

**Questions 4 and 5 are based on the following reading**

**passage**.

The complications frequently accompanying diabetes,

such as impairment of vision and of kidney function, are

now thought to result from the lack of continuous control

of blood glucose concentrations. The healthy pancreas,

in response to increases in blood glucose concentration,

releases small quantities of insulin throughout

the day and thereby maintains the concentration within

physiological limits (normoglycemia). But the diabetic

generally receives only one large dose daily. The

diabetic‘s blood glucose concentration can thus fluctuate

greatly during the interval between doses, and it has

been suggested that the complications result from the

periods of high concentrations of blood glucose

(hyperglycemia). Many investigators thus believe that

restoration of normoglycemia might halt the progression

of such complications and perhaps even reverse them.

85

**For the following question, consider each of the**

**choices separately and select all that apply**

4. The author provides information that would answer

which of the following questions?

A What is hyperglycemia?

B What is one cause of hyperglycemia?

C What are some of the organs that can be

adversely affected by hyperglycemia?

5. Select the sentence that shows the cause of radical

changes in the diabetic‘s blood glucose concentration.

**Questions 6 to 8 are based on the following reading**

**passage**.

The success of fluoride in combating dental decay is

well established and, without a doubt, socially beneficial.

However, fluoride's toxic properties have been known for

a century. In humans excessive intake (for adults, over 4

milligrams per day) over many years can lead to skeletal

fluorosis, a well-defined skeletal disorder, and in some

plant species, fluoride is more toxic than ozone, sulfur

dioxide, or pesticides.

Some important questions remain. For example, the

precise lower limit at which the fluoride content of bone

becomes toxic is still undetermined. And while fluoride

6. The passage suggests that it would be easier to

calculate fluoride intake from food if

A adequate diets were available for most people.

B individual eating habits were more uniform

C the fluoride content of food was more varied

D more people were aware of the fluoride content

of food

E methods for measuring the fluoride content of

food were more generally agreed on

7. One function of the second paragraph of the

passage is to

intake from water and air can be evaluated relatively

easily, it is much harder to estimate how much a given

population ingests from foodstuffs because of the wide

variations in individual eating habits and in fluoride

concentrations in foodstuffs.

A

B

C

D

E

raise doubts about fluoride's toxicity

introduce the issue of fluoride's toxicity

differentiate a toxic from a nontoxic amount of

fluoride

indicate that necessary knowledge of fluoride

remains incomplete

discuss the foodstuffs that are most likely to

contain significant concentrations of fluoride

**For the following question, consider each of the**

**choices separately and select all that apply**

8.The passage suggests which of the following about

the effect of fluoride on humans?

A The effect of fluoride intake from water and air

is relatively difficult to monitor.

B An intake of 4 milligrams over a long period of

time usually leads to a skeletal disorder in humans.

C An intake of slightly more than 4 milligrams for

only a few months is not likely to be life-threatening.

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[*This page is intentionally left blank*. ]

87

**Questions 9 to 12 are based on the following reading**

**passage**.

*Line*

*5*

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*15*

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In February 1848 the people of Paris rose in revolt

against the constitutional monarchy of Louis-Philippe.

Despite the existence of excellent narrative accounts, the

February Days, as this revolt is called, have been largely

ignored by social historians of the past two decades. For

each of the three other major insurrections in

nineteenth-century Paris—July 1830, June 1843, and May

1871----there exists at least a sketch of participants'

backgrounds and an analysis, more or less rigorous, of the

reasons for the occurrence of the uprisings. Only in the

case of the February Revolution do we lack a useful

description of participants that might characterize it in the

light of what social history has taught us about the

process of revolutionary mobilization.

Two reasons for this relative neglect seem obvious.

First, the insurrection of February has been overshadowed

by that of June. The February Revolution overthrew a

regime, to be sure, but met with so little resistance that it

failed to generate any real sense of historical drama. Its

successor, on the other hand, appeared to pit key

*40*

*45*

*50*

*55*

Experiences are retold, but participants typically

resume their daily routines without ever recording

their activities. Those who played salient roles may

become the objects of highly embellished verbal

accounts or in rare cases, of celebratory articles in

contemporary periodicals. And it is true that the

publicly acknowledged leaders of an uprising

frequently write memoirs. However, such

documents are likely to be highly unreliable,

unrepresentative, and unsystematically preserved,

especially when compared to the detailed judicial

dossiers prepared for everyone arrested following a

failed insurrection. As a consequence, it may prove

difficult or impossible to establish for a successful

revolution a comprehensive and trustworthy picture

of those who participated, or to answer even the

most basic questions one might pose concerning the

social origins of the insurgents.

socioeconomic groups in a life-or-death struggle and was

widely seen by contemporary observers as marking a

historical departure. Through their interpretations, which

*25*

*30*

*35*

exert a continuing influence on our understanding of the

revolutionary process, the impact of the events of June

has been magnified, while, as an unintended consequence,

the significance of the February insurrection has been

diminished. Second, like other "successful" insurrections,

the events of February failed to generate the most

desirable kinds of historical records. Although the June

insurrection of 1848 and the Paris Commune of 1871

would be considered watersheds of nineteenth-century

French history by any standard, they also present the

social historian with a signal advantage: these failed

insurrections created a mass of invaluable documentation

as a by-product of authorities‘ efforts to search out and

punish the rebels.

Quite different is the outcome of successful

insurrections like those of July 1830 and February 1848.

88

**For the following question, consider each of the**

**choices separately and select all that apply**

9. According to the passage, a useful description

of participants"(lines 11-12) exists for which of the

following insurrections of nineteenth-century

France?

A The July insurrection of 1830

B The February Revolution of 1848

C The May insurrection of 1871

10. Which of the following, best describes the

organization of the second paragraph?

12. Which of the following is the most logical objection

to the claim made (lines 38-39) ?

A

The thesis of the passage is stated and

supporting evidence systematically presented.

A The February Revolution of 1848 is much less

significant than the July insurrection of 1830.

B

C

D

E

Two views regarding the thesis presented in the

first paragraph are compared and contrasted

Evidence refuting the thesis presented in the

first paragraph is systematically presented.

The thesis presented in the first paragraph is

systematically supported.

The thesis presented in the first paragraph is

further defined and a conclusion drawn.

B

C

D

The backgrounds and motivations of participants

in the July insurrection of 1830 have been

identified, however cursorily.

Even less is known about the July insurrection

of 1830 than about the February Revolution

of 1848.

Historical records made during the July

insurrection of 1830 are less reliable than those

made during the May insurrection of 1871.

11. Which of the following can be inferred about the

"detailed judicial dossiers" referred to in line 50?

E

The importance of the July insurrection of 1830

has been magnified at the expense of the

A

B

C

D

E

Information contained in the dossiers sheds

light on the social origins of a revolution's

participants.

The dossiers closely resemble the narratives

written by the revolution's leaders in their

personal memoirs.

The information that such dossiers contain is

untrustworthy and unrepresentative of a

revolution's participants.

Social historians prefer to avoid such dossiers

whenever possible because they are excessively

detailed.

The February Revolution of 1848 produced

more of these dossiers than did the June

insurrection.

89

significance of the February Revolution of

1848.

**Exercise 16**

**Questions 1 to 3 are based on the following reading**

**passage**.

One advantage of breeding African bees with other

bee types (Africanization) may be resistance to the para-

sitic mite *Varroa jacobsoni,* a major threat to modern

*Line* beekeeping. In parts of Europe, this mite is devastating

**For the following question, consider each of the**

**choices separately and select all that apply**

1. The author cites all of the following as evidence that

Africanized bees' resistance to *Varroa jacobsoni* is

superior to that of European bees:

A *Varroa jacobsoni* is killing many bee colonies in

*5*

*10*

*15*

honeybees and killing many colonies despite preventive

measures by beekeepers. But in Brazil *Varroa jacobsoni*

has been present in Africanized bees since 1972 without

the loss of a single colony, even though beekeepers there

undertook no preventive measures. The mites lay eggs

within the brood cells of immature bees, and developing

mites feed on the hemolymph (blood) of bee pupae. But

fewer mites reproduce in Africanized bees than in

European bees. Some researchers point out that this

resistance may be related to the Africanized worker bee's

shorter development period, which prevents some mites

from reaching maturity. Recently the mite has become a

serious problem in colonies of European bees in North

America. Africanization of these bees may be the best

Europe.

B Beekeepers in Brazil have not used preventive

measures to protect their colonies.

C At least some European bee colonies have been

saved by preventive measures.

2. Select the sentence that indicates one possible reason

the Africanized bees in Brazil have successfully

resisted *Varroa jacobsoni* .

3. The author's argument regarding the resistance of

Africanized bees to *Varroa jacobsoni* would be

most weakened if which of the following were true?

safeguard against this parasite.

A

B

C

D

E

The bees in Brazil were resistant before being

Africanized.

The number of bee colonies in North American

increased dramatically whereas the number in

Brazil remained unchanged.

Mites found in European bees reproduce at a

faster rate than mites of identical species

found in the bees in Brazil.

Africanized bees retain many of the characteris-

tics of European bees.

Bee colonies in Europe continue to produce

greater quantities of honey than do those in

Brazil.

90

**Questions 4 and 5 are based on the following reading**

**passage**.

Innovative as it is, Luis Valdez' *acto* owes much to the

theater traditions or other periods and regions. Like early

Spanish American religious dramas, secular folk dramas,

*Line* and the Mexican *carpas* of a somewhat later period, *actos*

4. Which of the following best describes the author's

evaluation of the views of the critics?

(A) Their views, if correct, do not preclude the

existence of an Italian influence on the *acto*.

(B) Their views are unlikely to be correct, given

the differences existing between Mexican and

*5*

*10*

*15*

are usually performed outdoors by traveling groups of

players or by local theater groups. The improvised comic

satire of the *actos* is often attributed to Valdez' study of

the Italian *commedia dell' arte* of the sixteenth century,

although some critics see it as a direct reflection of the

comic and improvisational qualities of the more

contemporary and local *carpas* of Mexican theater. The

Italian influence is likely, whatever Valdez‘ immediate

source: the Mexican *carpas* themselves are said to have

originated from the theater pieces of a sixteenth-century

Spanish writer inspired by encounters with Italian

*commedia dell'arte* troupes on tour in Spain.

91

Mexican American theater.

(C) Their views concerning the Mexican *carpa* are

essentially correct, but they lack familiarity

with the *acto.*

(D) Their views are probably more correct than the

views of those who have attributed the

comic and improvisational elements of the

*acto* to earlier sources.

(E) Their views betray a lack of familiarity with

the *commedia dell'arte*.

5. Which of the following, if true, most strengthens

the author's argument concerning the debt of the

*acto* to the theater traditions of other periods and

regions?

(A) Many popular forms of theater rely heavily

on improvisation.

(B) Plays resembling the *acto* in structure were

written in the 1970's by West African

playwrights who are interested in dramatizing

the richness of their own cultures.

(C) The use of masks has, at one time or another,

been characteristic of the theater traditions

of almost all cultures, even those most isolated

from outside influences.

(D) During a strike, it is common for union members

to present musical skits dramatizing the

values of solidarity and resistance.

(E) Before 1965 Luis Valdez had attended many

performances of traditional Mexican theater

groups touring the western United States.

**Questions 6 and 7 are based on the following reading**

**passage**.

The appreciation of traditional oral American Indian

literature has been limited, hampered by poor translations

and by the difficulty, even in the rare culturally sensitive

*Line* and aesthetically satisfying translation, of completely

6. Which of the following is most likely one of the

reasons that the author mentions the work of

N. Scott Momaday?

(A) To illustrate how the author believes that

*5*

*10*

*15*

conveying the original's verse structure, tone, and syntax.

By writing in English and experimenting with European

literary forms, contemporary American Indian writers

have broadened their potential audience, while clearly

retaining many essential characteristics of their ancestral

oral traditions. For example, Pulitzer-prize-winning

author N. Scott Momaday's poetry often treats art and

mortality in a manner that recalls British romantic poetry,

while his poetic response to the power of natural forces

recalls Cherokee oral literature. Similarly, his novels, an

art form European in origin, display an eloquence that

echoes the oratorical grandeur of the great nineteenth-

some American Indian writers have broadened

their potential audience

(B) To emphasize the similarities between

Momaday's writings and their European

literary models

(C) To demonstrate the contemporary appeal of

traditional Native American oral literature

(D) To suggest that contemporary American Indian

writers have sacrificed traditional values for

popular literary success

(E) To imply the continuing popularity of transla-

tions of oral American Indian literature

century American Indian chiefs.

**For the following question, consider each of the**

**choices separately and select all that apply**

7. Which of the following can be inferred from the

passage about written translations of oral Native

American poetry?

A They were often made by writers who were

intimately familiar with both English and Native

American languages.

B They were less widely read than are the works

of contemporary Native American poets

writing in English.

C They were less dependent on European literary

models than are the works of contemporary Native

American poets writing in English.

92

**Question 8 is based on the following reading passage.**

Both Fuchs and Sanborn have suggested that the effect

of discrimination by consumers on the earnings of

self-employed women may be greater than the effect of

8. A study of the practices of financial institutions that

revealed no discrimination against self-employed women

would tend to contradict which of the following?

*Line*

either government or private employer discrimination on

*5*

*10*

*15*

the earnings of women employees. To test this hypothesis,

Brown selected a large sample of White male and female

workers from the 1970 Census and divided them into

three categories: private employees, government

employees, and self-employed. Brown's results suggest

that men and women are not treated the same by

employers and consumers. For men, self-employment is

the highest earnings category, with private employment

next, and government lowest. For women, this order is

reversed. One can infer from Brown's results that

consumers discriminate against self-employed women. In

addition, self-employed women may have more difficulty

than men in getting good employees and may encounter

discrimination from suppliers and from financial

institutions.

93

(A) Some tentative results of Fuchs's study

(B) Some explicit results of Brown's study

(C) A suggestion made by the author

(D) Fuchs's hypothesis

(E) Sanborn's hypothesis

**Questions 9 and 10 are based on the following reading**

**passage.**

If people are regarded only as machines guided by

logic, as they were by some "scientistic" thinkers, rhetoric

is likely to be held in low regard; for the most obvious

truth about rhetoric is that it speaks to the whole person.

It presents its arguments first to the person as a rational

being. Logical argument is the plot, as it were, of any

speech or essay that is respectfully intended to persuade

people. Yet it is a characterizing feature of rhetoric that it

goes beyond this and appeals to the parts of our nature

that are involved in feeling, desiring, acting, and suffering.

It recalls relevant instances of the emotional reactions of

people to circumstances-real or fictional-that are similar

to our own circumstances.

94

9. The passage suggests that the disparagement of

rhetoric by some people can be traced to their

(A) reaction against science

(B) lack of training in logic

(C) desire to persuade people as completely as

possible

(D) misunderstanding of the use of the term "scientistic"

(E) view of human motivation

**For the following question, consider each of the**

**choices separately and select all that apply**

10. Which of the following states the author's

main point about logical argument?

A It is a sterile, abstract discipline, of little use in

real life.

B It is an essential element of persuasive

discourse, but only one such element.

C It is essential to persuasive discourse because it

deals with universal truths.

**Questions 11 to 13 are based on the following reading**

**passage**.

When a molten metal or metallic alloy is cooled to a

solid, a crystalline structure is formed that depends on the

particular alloy composition. In contrast, molten

*Line* nonmetallic glass-forming materials, when cooled, do not

*5* assume a crystalline structure, but instead retain a

structure somewhat like that of the liquid--an amorphous

structure. At room temperature, the natural long-term

tendency for both types of materials is to assume the

crystalline structure. The difference between the two is in

11. The author implies that the rate at which the molten

materials discussed in the passage are cooled is a

determinant of the

(A) chemical composition of the resulting solids

(B) strength of the chemical bonds that are formed

(C) kinetics of the materials' crystalline structure

(D) structure the materials assume

(E) stability of the materials' crystalline structure

*10*

*15*

the kinetics or rate of formation of the crystalline

structure, which is controlled by factors such as the nature

of the chemical bonding and the ease with which atoms

move relative to each other. Thus, in metals, the kinetics

favors rapid formation of a crystal line structure, whereas

in nonmetallic glasses the rate of formation is so slow that

almost any cooling rate is sufficient to result in an

amorphous structure.

95

12. It can be inferred from the passage that, theoretically,

molten nonmetallic glasses assume a crystalline

structure rather than an amorphous structure only if

they are cooled

(A) very evenly, regardless of the rate

(B) rapidly, followed by gentle heating

(C) extremely slowly

(D) to room temperature

(E) to extremely low temperatures

13. Select the sentence in which the author illustrates the

causes of the rate of formation of the crystalline

structure.

***Exercise 17***

Volcanic rock that forms as fluid lava chills rapidly is

called pillow lava. This rapid chilling occurs when lava erupts

directly into water (or beneath ice) or when it flows across a

shoreline and into a body of water. While the term ―pillow lava‖

suggests a definite shape, in fact geologists disagree. Some

geologists argue that pillow lava is characterized by discrete,

ellipsoidal masses. Others describe pillow lava as a tangled

mass of cylindrical, interconnected flow lobes. Much of this

controversy probably results from unwarranted extrapolations

of the original configuration of pillow flows from two-

dimensional cross sections of eroded pillows in land

outcroppings. Virtually any cross section cut through a tangled

mass of interconnected flow lobes would give the appearance

of a pile of discrete ellipsoidal masses. Adequate three-

dimensional images of intact pillows are essential for defining

the true geometry of pillowed flows and thus ascertaining their

mode of origin. Indeed, the term ―pillow,‖ itself suggestive of

discrete masses, is probably a misnomer.

(165 words)

96

1. In the passage, the author is primarily interested in c

(A) analyzing the source of a scientific controversy

(B) criticizing some geologists‘ methodology

(C) pointing out the flaws in a geological study

(D) proposing a new theory to explain existing

scientific evidence

(E) describing a physical phenomenon

**For the following question, consider each of the**

**choices separately and select all that apply**

2. The author of the passage would most probably

agree that the geologists mentioned in the fourth

sentence have made which of the following errors

in reasoning? a

A Generalized unjustifiably from available evidence.

B Deliberately ignored existing counterevidence.

C Repeatedly failed to take new evidence into account.

3. The author implies that the ―controversy‖ might be

resolved if b

(A) geologists did not persist in using the term

―pillow‖

(B) geologists did not rely on potentially misleading

information

(C) geologists were more willing to confer directly

with one another

(D) two-dimensional cross sections of eroded

pillows were available

(E) existing pillows in land outcroppings were not

so badly eroded

Draft passages in Proust‘s 1909 notebooks indicate that

the transition from essay to novel *Remembrance of Things*

*Past* began in *Contre Saint-Beuve*, when Proust introduced

several examples to show the powerful influence that

involuntary memory exerts over the creative imagination. In

effect, in trying to demonstrate that the imagination is more

profound and less submissive to the intellect than

Saint-Beuve assumed, Proust elicited vital memories of his

own and, finding subtle connections between them, began to

amass the material for *Remembrance*. By August, Proust was

writing to Vallette, informing him of his intention to develop

the material as a novel. Maurice Bardeche, in *Marcel Proust,*

*romancier*, has shown the importance in the drafts of

*Remembrance* of spontaneous and apparently random

associations of Proust‘s subconscious.

(124 words)

97

**For the following question, consider each of the**

**choices separately and select all that apply**

4. According to the passage, in drafts of *Contre Saint-*

*Beuve* Proust set out to show that Saint-Beuve made

which of the following mistakes as a critic? B

A Saint-Beuve made no effort to study the development

of a novel through its drafts and revisions.

B Saint-Beuve assigned too great a role in the

creative process to a writer‘s conscious

intellect.

C Saint-Beuve concentrated too much on plots and not

enough on imagery and other elements of style.

5. In the context in which it appears, "spontaneous" in the

last sentence most nearly means. e

A contrived

B powerful

C abstruse

D involuntary

E premeditated

The great variety of plants in Hawaii is a result of the

long-distance dispersal of seeds. There is some dispute

about the method of transport involved. Some biologists

argue that ocean and air cur-rents are responsible for the

transport of plant seeds to Hawaii. Yet the results of

flotation experiments and the low temperatures of air

currents cast doubt on these hypotheses. More probable is

bird transport, either externally, by accidental attachment of

the seeds to feathers, or internally, by the swallowing of

fruit and subsequent excretion of the seeds. While it is

likely that fewer varieties of plant seeds have reached Hawaii

externally than internally, more varieties are known to be

adapted to external than to internal transport.

6. The author of the passage is primarily concerned with b

(A) discussing different approaches biologists have

taken to testing theories about the distribution of

plants in Hawaii

(B) discussing different theories about the transport of

plant seeds to Hawaii

(C) discussing the extent to which air currents are

responsible for the dispersal of plant seeds to

Hawaii

(D) resolving a dispute about the adaptability of plant

seeds to bird transport

(E) resolving a dispute about the ability of birds to

carry plant seeds long distances

(119 words)

7. The author mentions the results of flotation

experiments on plant seeds most probably

in order to d

(A) support the claim that the distribution of plants in

Hawaii is the result of the long-distance dispersal of

seeds

(B) lend credibility to the thesis that air currents provide a

method of transport for plant seeds to Hawaii

(C) suggest that the long-distance dispersal of seeds is a

process that requires long periods of time

(D) challenge the claim that ocean currents are

responsible for the transport of plant seeds to Hawaii

(E) refute the claim that Hawaiian flora evolved

independently from flora in other parts of the world

98

Recent scholarship has strongly suggested that the aspects

of early New England culture that seem to have been most

distinctly Puritan, such as the strong religious orientation and

the communal impulse, were not typical of New England as a

whole, but were largely confined to the two colonies of

Massachusetts and Connecticut. Thus, what in contrast to the

Puritan colonies appears to Professor Davis to be peculiarly

Southern was not only more typically English than the

cultural patterns exhibited by Puritan Massachusetts and

Connecticut, but also almost certainly characteristic of most

other early modern British colonies from Barbados north to

Rhode Island and New Hampshire. Within the larger

framework of American colonial life, then, not the Southern

but the Puritan colonies appear to have been distinctive, and

even they seem to have been rapidly assimilating to the

dominant cultural patterns by the late Colonial period.

( 145 words)

8. Which of the following statements could most logically

follow the last sentence of the passage? b

(A) Thus, had more attention been paid to the

evidence, Davis would not have been tempted

to argue that the culture of the South

diverged greatly from Puritan culture in the

seventeenth century.

(B) Thus, convergence, not divergence, seems to

have characterized the cultural development

of the American colonies in the eighteenth

century.

(C) Thus, without the cultural diversity represented

by the America South, the culture of colonial

America would certainly have been

homogeneous in nature.

(D) Thus, the contribution of Southern colonials to

American culture was certainly overshadowed

by that of the Puritans.

(E) Thus, the culture of America during the Colonial

period was far more sensitive to outside

influences than historians are accustomed to

acknowledge.

99

A serious critic has to comprehend the particular content,

unique structure, and special meaning of a work of art. And

here she faces a dilemma. The critic must recognize the

artistic element of uniqueness that requires subjective reaction;

yet she must not be unduly prejudiced by such reactions. It is

necessary that a critic develop a sensibility informed by

familiarity with the history of art and aesthetic theory. On the

other hand, it is insufficient to treat the artwork solely

historically, in relation to a fixed set of ideas or values. The

critic‘s knowledge and training are, rather, a preparation of the

cognitive and emotional abilities needed for an adequate

personal response to an artwork‘s own particular qualities.

(118 words)

100

9. Select the sentence that gives a reason why it is

insufficient to treat a work of art solely historically.

10. The author‘s argument is developed primarily by

the use of b

(A) an attack on sentimentality

(B) an example of successful art criticism

(C) a critique of artists training

(D) a warning against extremes in art criticism

(E) an analogy between art criticism and art

production

***Exercise 18***

Theorists are divided concerning the origin of the Moon.

Some hypothesize that the Moon was formed in the same

way as were the planets in the inner solar system (Mercury,

Venus, Mars, and Earth)—from planet-forming materials in

the presolar nebula. But, unlike the cores of the inner planets,

the Moon‘s core contains little or no iron, while the typical

planet-forming materials were quite rich in iron. Other

theorists propose that the Moon was ripped out of the Earth‘s

rocky mantle by the Earth‘s collision with another large

celestial body after much of the Earth‘s iron fell to its core. One

problem with the collision hypothesis is the question of how a

satellite formed in this way could have settled into the nearly

circular orbit that the Moon has today. Fortunately, the

collision hypothesis is testable. If it is true, the mantle rocks

of the Moon and the Earth should be the same geochemically.

(155 words)

**For the following question, consider each of the**

**choices separately and select all that apply**

**1.** According to the passage, Mars and the Earth are

similar in which of the following ways? B c

A Their satellites were formed by collisions with

other celestial bodies.

B Their cores contain iron.

C They were formed from the presolar nebula.

101

2. The author implies that a nearly circular orbit is

unlikely for a satellite that d

(A) circles one of the inner planets

(B) is deficient in iron

(C) is different from its planet geochemically

(D) was formed by a collision between two celestial

bodies

(E) was formed out of the planet-forming materials

in the presolar nebula

3. Which of the following, if true, would be most likely

to make it difficult to verify the collision hypothesis

in the manner suggested by the author? b

(A) The Moon‘s core and mantle rock are almost

inactive geologically.

(B) The mantle rock of the Earth has changed in

composition since the formation of the

Moon, while the mantle rock of the Moon has

remained chemically inert.

(C) Much of the Earth‘s iron fell to the Earth‘s core

long before the formation of the Moon, after

which the Earth‘s mantle rock remained

unchanged.

(D) Certain of the Earth‘s elements, such as platinum,

gold, and iridium, followed iron to the

Earth‘s core.

(E) The mantle rock of the Moon contains elements

such as platinum, gold, and iridium.

A long-held view of the history of the English

colonies that became the United States has been that

England‘s policy toward these colonies before 1763 was

dictated by commercial interests and that a change to a

more imperial policy, dominated by expansionist militarist

objectives, generated the tensions that ultimately led to the

American Revolution. In a recent study, Stephen Saunders

Webb has presented a formidable challenge to this view.

According to Webb, England already had a military

imperial policy for more than a century before the

American Revolution. He sees Charles II, the English

monarch between 1660 and 1685, as the proper successor

expedition in more than a century, but it proved to be an

utter failure. Under Charles II, the English army was too

small to be a major instrument of government. Not until the

war France in 1697 did William III persuade Parliament to

create a professional standing army, and Parliaments price

for doing so was to keep the army under tight legislative

control. While it may be true that the crown attempted to

curtail the power of the colonial upper classes, it is hard to

imagine how the English army during the seventeenth

century could have provided significant military support for

such a policy.

(473 words)

of the Tudor monarchs of the sixteenth century and of

Oliver Cromwell, all of whom were bent on extending

centralized executive power over England‘s possessions

through the use of what Webb calls ―garrison

government.‖Garrison government allowed the colonists a

legislative assembly but real authority, in Webb‘s view,

belonged to the colonial governor, who was appointed by

the king and supported by the ―garrison,‖ that is, by the

local contingent of English troops under the colonial

governor‘s command.

According to Webb, the purpose of garrison

government was to provide military support for a royal

policy designed to limit the power of the upper classes in

the American colonies. Webb argues that the colonial

legislative assemblies represented the interests not of the

common people but of the colonial upper classes, a

coalition of merchants and nobility who favored self-rule

and sought to elevate legislative authority at the expense of

the executive. It was, according to Webb, the colonial

governors who favored the small farmer, opposed the

plantation system, and tried through taxation to break up

large holdings of land. Backed by the military presence of

the garrison, these governors tried to prevent the gentry and

merchants, allied in the colonial assemblies, from

transforming colonial America into a capitalistic oligarchy.

Webb‘s study illuminates the political alignments that

existed in the colonies in the century prior to the American

Revolution, but his view of the crown‘s use of the military

as an instrument of colonial policy is not entirely

convincing. England during the seventeenth century was

not noted for its military achievements. Cromwell did

mount England‘s most ambitious overseas military

102

4. The passage can best be described as a c

(A) survey of the inadequacies of a conventional

viewpoint

(B) reconciliation of opposing points of view

(C) summary and evaluation of a recent study

(D) defense of a new thesis from anticipated

objections

(E) review of the subtle distinctions between

apparently similar views

5. The passage suggests that the long-standing view

referred to in the first paragraph argued that d

(A) the colonial governors were sympathetic to the

demands of the common people

(B) Charles II was a pivotal figure in the shift of

English monarchs toward a more imperial

policy in their governorship of the American

colonies.

(C) the American Revolution was generated largely

out of a conflict between the colonial upper

classes and an alliance of merchants and

small farmers

(D) the military did not play a major role as an

instrument of colonial policy until 1763

(E) the colonial legislative assemblies in the

colonies had little influence over the

colonial governors

103

6. According to the passage, Webb views Charles II as

the ―proper successor‖ (in the first paragraph) of the

Tudor monarchs and Cromwell because Charles II b

(A) used colonial tax revenues to fund overseas

military expeditions

(B) used the military to extend executive power

over the English colonies

(C) wished to transform the American colonies into

capitalistic oligarchies

(D) resisted the English Parliament‘s efforts to exert

control over the military

(E) allowed the American colonists to use legislative

assemblies as a forum for resolving

grievances against the crown

**For the following question, consider each of the**

**choices separately and select all that apply**

7. According to Webb‘s view of colonial history, which

of the following was (were) true of the merchants

and nobility mentioned in the second paragraph? A b

A They were opposed to policies formulated by

Charles II that would have transformed the

colonies into capitalistic oligarchies.

B They were opposed to attempts by the English

crown to limit the power of the legislative

assemblies.

C They were united with small farmers in their

opposition to the stationing of English troops

in the colonies.

At the Shadybrook dog kennel, all the adult animals were

given a new medication designed to reduce a dog‘s risk of

contracting a certain common infection. Several days after

the medication was administered, most of the puppies of

these dogs had elevated temperatures. Since raised body

temperature is a side effect of this medication, the kennel

owner hypothesized that the puppies‘ elevated temperatures

resulted from the medication‘s being passed to them

through their mothers‘ milk.

8.

Which of the following, if true, provides the most

support for the kennel owner‘s hypothesis? c

(A) Some puppies have been given the new medication

directly but have not suffered elevated

temperatures as a side effect.

(B) The new medication has been well received by dog

breeders as a safe and effective way of preventing

the spread of certain common canine infections.

(C) None of the four puppies in the kennel who had

been bottle-fed with formula had elevated

temperatures.

(D) an elevated temperature is a side effect of a

number of medications for dogs other than the new

medication administered at the kennel.

(E) Elevated temperatures such as those suffered by

most of the puppies in the kennel rarely have

serious long-term effects on a puppy‘s health.

104

The social sciences are less likely than other intellectual

enterprises to get credit for their accomplishments.

Arguably, this is so because the theories and conceptual

constructs of the social sciences are especially accessible:

human intelligence apprehends truths about human affairs

with particular facility.

This underappreciation of the social sciences contrasts

oddly with what many see as their overutilization. Game

theory is pressed into service in studies of shifting

international alliances. Evaluation research is called upon

to demonstrate successes or failures of social programs. Yet

this rush into practical applications is itself quite

understandable: public policy must continually be made,

and policymakers rightly feel that even tentative findings

and untested theories are better guides to decision-making

than no findings and no theories at all.

(123 words)

105

9. Select the sentence in the passage in which the author

refers to the same meaning as the ―overutilization‖ of

the social sciences.

Zooplankton, tiny animals adapted to an existence in the

ocean, have evolved clever mechanisms for obtaining their

food, miniscule phytoplankton (plant plankton). A very

specialized feeding adaptation in zooplankton is that of the

tadpolelike appendicularian who lives in a walnut-sized (or

smaller) balloon of mucus equipped with filters that capture

and concentrate phytoplankton. The balloon, a transparent

structure that varies in design according to the type of

appendicularian inhabiting it, also protects the animal and

helps to keep it afloat. Water containing phytoplankton is

pumped by the appendicularian‘s muscular tail into the

balloon‘s incurrent filters, passes through the feeding filter

where the appendicularian sucks the food into its mouth,

and then goes through an exit passage. Found in all the

oceans of the world, including the Arctic Ocean,

appendicularians tend to remain near the water‘s surface

where the density of phytoplankton is greatest.

(143 words)

106

10. It can be inferred from the passage that which of the

following is true of appendicularians? c

(A) They are exclusively carnivorous.

(B) They have more than one method of obtaining

food.

(C) They can tolerate frigid water.

(D) They can disguise themselves by secreting

mucus.

(E) They are more sensitive to light than are other

zooplankton.

***Exercise 19***

The common cold, produced most often by rhinoviruses,

is intractable to antiviral defense. A defense against

rhinoviruses might nonetheless succeed by exploiting

hidden similarities among the rhinovirus strains. For

example, most rhinovirus strains bind to the same kind of

molecule (delta-receptors) on a cell‘s surface when they

attack human cells. Colonno, taking advantage of these

common receptors, devised a strategy for blocking the

attachment of rhinoviruses to their appropriate receptors.

Rather than fruitlessly searching for an antibody that would

bind to all rhinoviruses, Colonno realized that an antibody

binding to the common receptors of a human cell would

prevent rhinoviruses from initiating an infection. Because

human cells normally do not develop antibodies to

components of their own cells, Colonno injected human

cells into mice, which did produce an antibody to the

common receptor. In isolated human cells, this antibody

proved to be extraordinarily effective at thwarting the

rhinovirus. Moreover, when the antibody was given to

chimpanzees, it inhibited rhinoviral growth, and in humans

it lessened both the severity and duration of cold symptoms.

(173 words)

1. It can be inferred from the passage that a cell

lacking delta-receptors will be e

(A) unable to prevent the rhinoviral nucleic acid

from shedding its capsid

(B) defenseless against most strains of rhinovirus

(C) unable to release the viral progeny it develops

after infection

(D) protected from new infections by antibodies

to the rhinovirus

(E) resistant to infection by most strains of

rhinovirus

2. It can be inferred from the passage that the purpose

of Colonno‘s experiments was to determine whether d

(A) chimpanzees and humans can both be infected

by rhinoviruses

(B) chimpanzees can produce antibodies to human

cell-surface receptors

(C) a rhinovirus‘ nucleic acid might be locked in

its protein coat

(D) binding antibodies to common receptors

could produce a possible defense against

rhinoviruses

(E) rhinoviruses are vulnerable to human anti-

bodies

3. In the context in which it appears, "thwarting" most

nearly means b

A accelerating

B blocking

C warming

D abetting

E neutralizing

107

4. Which of the following most logically completes the

argument?

Alivia‘s government has approved funds for an

electricity-generation project based on the construction of

a pipeline that will carry water from Lake Cylus, in the

mountains, to the much smaller Lake Tifele, in a nearby

valley. The amount of electricity generated will be

insufficient by itself to justify the project‘s cost, even if

the price of imported oil-Alivia‘s primary source of

electricity-increases sharply. Nonetheless, the pipeline

project is worth its cost, because ——b

108

(A) the price of oil, once subject to frequent sharp

increases, has fallen significantly and is now fairly

stable

(B) the project could restore Lake Tifele, which is

currently at risk of drying up and thus of being lost

as a source of recreation income for Alivia

(C) the government of Alivia is currently on excellent

terms with the governments of most of the

countries from which it purchases oil

(D) it would cost less to generate electricity by moving

water from Lake Cylus to lake Tifele than to do so

by moving water from Lake Cylus to another

valley lake

(E) Alivian officials do not expect that the amount of

electricity used in Alivia will increase substantially

within the next ten years

Students of United States history, seeking to identify the

circumstances that encouraged the emergence of feminist

movements, have thoroughly investigated the mid-

nineteenth-century American economic and social conditions

that affected the status of women. These historians, however,

have analyzed less fully the development of specifically

feminist ideas and activities during the same period.

Furthermore, the ideological origins of feminism in the

United States have been obscured because, even when

historians did take into account those feminist ideas and

activities occurring within the United States, they failed to

recognize that feminism was then a truly international

movement actually centered in Europe. American feminist

activists who have been described as ―solitary‖ and

―individual theorists‖ were in reality connected to a

movement—utopian socialism— which was already

popularizing feminist ideas in Europe during the two decades

that culminated in the first women‘s rights conference held at

Seneca Falls, New York, in 1848.

(148 words)

5. It can be inferred that the author considers those

historians who describe early feminists in the United

States as ―solitary‖ to be a

(A) insufficiently familiar with the international

origins of nineteenth-century American femi-

nist thought

(B) overly concerned with the regional diversity

of feminist ideas in the period before 1848

(C) not focused narrowly enough in their geo-

graphical scope

(D) insufficiently aware of the ideological conse-

quences of the Seneca Falls conference

(E) insufficiently concerned with the social condi-

tions out of which feminism developed

6. According to the passage, which of the following

is true of the Seneca Falls conference on women‘s

rights? c

(A) It was primarily a product of nineteenth-

century Saint-Simonian feminist thought.

(B) It was the work of American activists who

were independent of feminists abroad.

(C) It was the culminating achievement of the

utopian socialist movement.

(D) It was a manifestation of an international

movement for social change and feminism.

(E) It was the final manifestation of the women‘s

rights movement in the United States in the

nineteenth century.

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Researchers of the Pleistocene epoch have developed

all sorts of more or less fanciful model schemes of how

they would have arranged the Ice Age had they been in

charge of events. For example, an early classification of

Alpine glaciations suggested the existence there of four

glaciations, named the Gunz, Mindel, Riss, and Wurm. This

succession was based primarily on a series of deposits and

events not directly related to glacial and interglacial periods,

rather than on the more usual modern method of studying

biological remains found in interglacial beds themselves

interstratified within glacial deposits. Yet this succession

was forced willy-nilly onto the glaciated parts of Northern

Europe, with hopes of ultimately piecing them together to

provide a complete Pleistocene succession. Eradication of

7. According to the passage, one of the reasons for the

deficiencies of the ―early classification of Alpine

glaciation‖ is that it was c

(A) derived from evidence that was only tangentially

related to times of actual glaciation

(B) based primarily on fossil remains rather than on

actual living organisms

(C) an abstract, imaginative scheme of how the

period might have been structured

(D) based on unmethodical examinations of

randomly chosen glacial biological remains

(E) derived from evidence that had been haphazardly

gathered from glacial deposits and inaccurately

evaluated

the Alpine nomenclature is still proving a Herculean task.

8. Which of the following does the passage imply about

(132 words)

110

the ―early classification of Alpine glaciation‖ ? d

(A) It should not have been applied as widely as

it was.

(B) It represents the best possible scientific practice,

given the tools available at the time.

(C) It was a valuable tool, in its time, for measuring

the length of the four periods of glaciation.

(D) It could be useful, but only as a general guide

to the events of the Pleistocene epoch.

(E) It does not shed any light on the methods used

at the time for investigating periods of glaciation.

When speaking of Romare Bearden, one is tempted to

say, ―A great Black American artist.‖ The subject matter of

Bearden‘s collages is certainly Black. Portrayals of the folk

of Mecklenburg County, North Carolina, whom he

remembers from early childhood, of the jazz musicians and

tenement roofs of his Harlem days, of Pittsburgh

steelworkers, and his reconstruction of classical Greek

myths in the guise of the ancient Black kingdom of Benin,

attest to this. In natural harmony with this choice of subject

matter are the social sensibilities of the artist, who remains

active today with the Cinque Gallery in Manhattan, which

he helped found and which is devoted to showing the work

**For the following question, consider each of the**

**choices separately and select all that apply**

9. According to the passage, all of the following are

depicted in Bearden‘s collages a b c

A workers in Pittsburgh‘s steel mills

B the jazz musicians of the Harlem Bearden used

to know

C people Bearden knew as a child

10. Select the sentence that indicates the explanatory goal

of minority artists.

(114 words)

111

when the author mentions Bearden‘s social

sensibilities and the subject matter of his collages.

[*This page is intentionally left blank*. ]

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***Exercise 20***

Diamonds, an occasional component of rare igneous

rocks called lamproites and kimberlites, have never been

dated satisfactorily. However, some diamonds contain minute

inclusions of silicate minerals, commonly olivine, pyroxene,

and garnet. These minerals can be dated by radioactive decay

techniques because of the very small quantities of

radioactive trace elements they, in turn, contain. Usually, it is

possible to conclude that the inclusions are older than their

diamond hosts, but with little indication of the time interval

involved. Sometimes, however, the crystal form of the

silicate inclusions is observed to resemble more closely the

internal structure of diamond than that of other silicate

minerals. When present, the resemblance is regarded as

compelling evidence that the diamonds and inclusions are

1. The author implies that silicate inclusions were most

often formed

(A) with small diamonds inside of them

(B) with trace elements derived from their host

minerals

(C) by the radioactive decay of rare igneous rocks

(D) at an earlier period than were their host

minerals

(E) from the crystallization of rare igneous material

2. Select the sentence in the passage that indicates a way

to determine the age of silicate minerals included in

diamonds.

truly cogenetic.

(121 words)

113

For some time scientists have believed that cholesterol

plays a major role in heart disease because people with

familial hypercholesterolemia, a genetic defect, have six to

eight times the normal level of cholesterol in their blood and

they invariably develop heart disease. These people lack

cell-surface receptors for low-density lipoproteins (LDL‘s),

converted to LDL‘s. The LDL receptors thus have a dual

effect in controlling LDL levels. They are necessary to

prevent oversynthesis of LDL‘s from VLDL remnants and

they are necessary for the normal removal of LDL‘s from the

blood. With this knowledge, scientists are now well on the

way toward developing drugs that dramatically lower

which are the fundamental carriers

of blood cholesterol to cholesterol levels in people afflicted with certain forms of

the body cells that use cholesterol. Without an adequate

familial hypercholesterolemia.

number of cell-surface receptors to remove LDL‘s from the

blood, the cholesterol-carrying LDL‘s remain in the blood,

increasing blood cholesterol levels. Scientists also noticed

that people with familial hypercholesterolemia appear to

produce more LDL‘s than normal individuals. How, scientists

wondered, could a genetic mutation that causes a slow-down

in the removal of LDL‘s from the blood also result in an

increase in the synthesis of this cholesterol-carrying protein?

Since scientists could not experiment on human body

tissue, their knowledge of familial hyper- cholesterolemia

was severely limited. However, a breakthrough came in the

laboratories of Yoshio Watanabe of Kobe University in Japan

in 1980. Watanabe noticed that a male rabbit in his colony

had ten times the normal concentration of cholesterol in its

blood. By appropriate breeding, Watanabe obtained a strain

of rabbits that had very high cholesterol levels. These rabbits

spontaneously developed heart disease. To his surprise,

Watanabe further found that the rabbits, like humans with

familial hypercholesterolemia, lacked LDL receptors. Thus,

scientists could study these Watanabe rabbits to gain a better

understanding of familial hyper-

cholesterolemia in humans.

Prior to the breakthrough at Kobe University, it was

known that LDL‘s are secreted from the liver in the form of a

precursor, called very low-density lipoproteins (VLDL‘s),

which carry triglycerides as well as relatively small amounts

of cholesterol. The triglycerides are removed from the

VLDL‘s by fatty and other tissues. What remains is a remnant

particle that must be removed from the blood. What scientists

learned by studying the Watanabe rabbits is that the removal

of the VLDL remnant requires the LDL receptor. Normally,

the majority of the VLDL remnants go to the liver where they

bind to LDL receptors and are degraded. In the Watanabe

rabbit, due to a lack of LDL receptors on liver cells, the

VLDL remnants remain in the blood and are eventually

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3. In the passage, the author is primarily concerned with

(A) presenting a hypothesis and describing

compelling evidence in support of it

(B) raising a question and describing an important

discovery that led to an answer

(C) showing that a certain genetically caused

disease can be treated effectively with drugs

(D) explaining what causes the genetic mutation

that leads to heart disease

(E) discussing the importance of research on

animals for the study of human disease

**For the following question, consider each of the**

**choices separately and select all that apply**

4. The passage supplies information to answer which

5. The passage implies that if the Watanabe rabbits

had had as many LDL receptors on their livers as

do normal rabbits, the Watanabe rabbits would

have been

(A) less likely than normal rabbits to develop heart

disease

(B) less likely than normal rabbits to develop high

concentrations of cholesterol in their blood

(C) less useful than they actually were to scientists

in the study of familial hypercholesterolemia

in humans

(D) unable to secrete VLDL‘s from their livers

(E) immune to drugs that lower cholesterol levels in

people with certain forms of familial

hypercholesterolemia

of the following questions EXCEPT?

6. The passage implies that Watanabe rabbits differ

A Which body cells are the primary users of

cholesterol?

B How did scientists discover that LDL‘s are

secreted from the liver in the form of a precursor?

C Where in the body are VLDL remnants

degraded?

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from normal rabbits in which of the following ways?

(A) Watanabe rabbits have more LDL receptors

than do normal rabbits.

(B) The blood of Watanabe rabbits contains more

VLDL remnants than does the blood of

normal rabbits.

(C) Watanabe rabbits have fewer fatty tissues than

do normal rabbits.

(D) Watanabe rabbits secrete lower levels of

VLDL‘s than do normal rabbits.

(E) The blood of Watanabe rabbits contains fewer

LDL‘s than does the blood of normal

rabbits.

Discussion of the assimilation of Puerto Ricans in the

United States has focused on two different factors: social

standing and the loss of national culture, depending on

whether the commentator is North American or Puerto Rican.

Many North American social scientists consider Puerto

Ricans as the most recent in a long line of ethnic entrants to

occupy the lowest rung on the social ladder. Such a ―socio-

demographic‖ approach tends to regard assimilation as a

benign process. In contrast, the ―colonialist‖ approach of

island-based writers tends to view assimilation as the forced

loss of national culture in an unequal contest with imposed

foreign values. There is, of course, a strong tradition of

cultural accommodation among other Puerto Rican thinkers,

like Eugenio Fernandez Mendez. But the Puerto Rican

intellectuals who have written most about the assimilation

process in the United States all advance cultural nationalist

views, advocating the preservation of minority cultural

distinctions and rejecting what they see as the subjugation of

7. It can be inferred from the passage that a writer such as

Eugenio Fernandez Mendez would most likely agree with

which of the following statements concerning members of

minority ethnic groups?

(A) It is necessary for the members of such groups

to adapt to the culture of the majority.

(B) The members of such groups generally encounter

a culture that is static and undifferentiated.

(C) Social mobility is the most important feature

of the experience of members of such groups.

(D) Social scientists should emphasize the cultural

and political aspects of the experience of

members of such groups.

(E) The assimilation of members of such groups

requires the forced abandonment of their

authentic national roots.

8. In the context in which it appears, "subjugation" in the

colonial nationalities.

(162 words)

116

last sentence most nearly means

A accommodation

B subjection

C assimilation

D incorporation

E defeatism

9. When cut, the synthetic material fiberglass, like asbestos,

releases microscopic fibers into the air. It is known that

people who inhale asbestos, fibers suffer impairment of

lung functions. A study of 300 factory workers who

regularly cut fiberglass showed that their lung capacity is,

on average, only 90 percent of that of a comparable group

of people who do not cut fiberglass.

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The statements above, if true, most strongly support

which of the following hypotheses?

(A) People who work with fiberglass are likely also to

work with asbestos.

(B) Fiberglass fibers impair lung function in people who

inhale them.

(C) Fiberglass releases as many fibers into the air when

cut as does asbestos.

(D) Coarse fibers do not impair lung function in people

who inhale them.

(E) If uncut, fiberglass poses no health risk to people who

work with it.

Simone de Beauvoir‘s work greatly influenced Betty

Friedan‘s----indeed, made it possible. Why, then, was it

Friedan who became the prophet of women‘s emancipation

in the United States? Political conditions, as well as a

certain anti-intellectual bias, prepared Americans and the

American media to better receive Friedan‘s deradicalized

and highly pragmatic *The Feminine Mystique*, published in

1963, than Beauvoir‘s theoretical reading of women‘s

situation in *The Second Sex.* In 1963 when *The Second Sex*

first appeared in translation in the United States, the

country had entered the silent, fearful fortress of the

anticommunist McCarthy years (1950-1954), and Beauvoir

was suspected of Marxist sympathies. Even *The Nation*, a

generally liberal magazine, warned its readers against

**For the following question, consider each of the**

**choices separately and select all that apply**

10. It can be inferred from the passage that which of the

following is a factor in the explanation of why

*The Feminine Mystique* was received more

positively in the United States than was *The*

*Second Sex*?

A By 1963 political conditions in the United

States had changed.

B Friedan‘s approach to the issue of women‘s

emancipation was less radical than Beauvoir‘s.

C Readers did not recognize the powerful influence of

Beauvoir‘s book on Friedan‘s ideas.

―certain political leanings‖ of the author.

(120 words)

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***Exercise 21***

Nevelson says, ―I have always wanted to show the

world that art is everywhere, except that it has to pass

through a creative mind.‖ Using mostly discarded wooden

objects like packing crates, broken pieces of furniture, and

abandoned architectural ornaments, all of which she has

hoarded for years, she assembles architectural constructions

of great beauty and power. Creating very freely with no

sketches, she glues and nails objects together, paints them

black, or more rarely white or gold, and places them in

boxes. These assemblages, walls, even entire environments

create a mysterious, almost awe-inspiring atmosphere.

Although she has denied any symbolic or religious intent in

her works, their three-dimensional grandeur and even their

titles, such as *Sky Cathedral* and *Night Cathedral*, suggest

1. Which of the following is one way in which Nevel-

son‘s art illustrates her theory as it is expressed in

the first sentence?

(A) She sculpts in wood rather than in metal or

stone.

(B) She paints her sculptures and frames them in

boxes.

(C) She makes no preliminary sketches but rather

allows the sculpture to develop as she works.

(D) She puts together pieces of ordinary objects

once used for different purposes to make her

sculptures.

(E) She does not deliberately attempt to convey

symbolic or religious meanings through her

such connotations.

(124 words)

119

sculpture.

Until recently astronomers have been puzzled by the

fate of red giant and supergiant stars. When the core of a

giant star whose mass surpasses 1.4 times the present

mass of our Sun (M⊙) exhausts its nuclear fuel, it is

unable to support its own weight and collapses into a tiny

neutron star. The gravitational energy released during this

implosion of the core blows off the remainder of the star

in a gigantic explosion, or a supernova.

Since around 50 percent of all stars are believed to

begin their lives with masses greater than 1.4M⊙, we

might expect that one out of every two stars would die as

a supernova. But in fact, only one star in thirty dies such a

violent death. The rest expire much more peacefully as

planetary nebulas. Apparently most massive stars manage

to lose sufficient material that their masses drop below

the critical value of 1.4 M⊙ before they exhaust their

nuclear fuel. Evidence supporting this view comes from

observations of IRC+10216, a pulsating giant star located

700 light-years away from Earth. A huge rate of mass loss

(1 M⊙ every 10,000 years) has been deduced from

infrared observations of ammonia (NH3) molecules

located in the circumstellar cloud around IRC+10216.

Recent microwave observations of carbon monoxide

(CO) molecules indicate a similar rate of mass loss and

demonstrate that the escaping material extends outward

from the star for a distance of at least one light-year.

Because we know the size of the cloud around

IRC+10216 and can use our observations of either NH3 or

CO to measure the outflow velocity, we can calculate an

age for the circumstellar cloud. IRC+10216 has

apparently expelled, in the form of molecules and dust

grains, a mass equal to that of our entire Sun within the

past ten thousand years. This implies that some stars can

shed huge amounts of matter very quickly and thus may

never expire as supernovas. Theoretical models as well as

statistics on supernovas and planetary nebulas suggest

that stars that begin their lives with masses around 6 M⊙

shed sufficient material to drop below the critical value of

1.4M⊙. IRC+10216, for example, should do this in a mere

50,000 years from its birth, only an instant in the life of a

star.

But what place does IRC+10216 have in stellar

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evolution? Astronomers suggest that stars like

IRC+10216 are actually ―protoplanetary nebulas‖ –old

giant stars whose dense cores have almost but not quite

rid themselves of the fluffy envelopes of gas around them.

Once the star has lost the entire envelope, its exposed

core becomes the central star of the planetary nebula and

heats and ionizes the last vestiges of the envelope as it

flows away into space. This configuration is a

full-fledged planetary nebula, long familiar to optical

astronomers.

2. The primary purpose of the passage is to

(A) offer a method of calculating the age of circum-

stellar clouds

(B) describe the conditions that result in a star‘s

expiring as a supernova

(C) discuss new evidence concerning the composition

of planetary nebulas

(D) explain why fewer stars than predicted expire as

supernovas

(E) survey conflicting theories concerning the

composition of circumstellar clouds

3. The view mentioned in the middle of the second

paragraph serves to

(A) reconcile seemingly contradictory facts

(B) undermine a previously held theory

(C) take into account data previously held to be

insignificant

(D) resolve a controversy

(E) question new methods of gathering data

4. It can be inferred from the passage that the author

assumes which of the following in the discussion of

the rate at which IRC+10216 loses mass?

(A) The circumstellar cloud surrounding

IRC+10216 consists only of CO

and NH3 molecules.

(B) The circumstellar cloud surrounding

IRC+10216 consists of material expelled

from that star.

(C) The age of a star is equal to that of its

circumstellar cloud.

(D) The rate at which IRC+10216 loses mass

varies significantly from year to year.

(E) Stars with a mass greater than 6 M⊙ lose

mass at a rate faster than stars with a mass

less than 6 M⊙ do.

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5. According to information provided by the passage,

which of the following stars would astronomers

most likely describe as a planetary nebula?

(A) A star that began its life with a mass of

5.5 M⊙, has exhausted its nuclear fuel, and

has a core that is visible to astronomers

(B) A star that began its life with a mass of 6 M⊙,

lost mass at a rate of 1 M⊙ per 10,000 years,

and exhausted its nuclear fuel in 40,000 years

(C) A star that has exhausted its nuclear fuel, has a

mass of 1.2 M⊙, and is surrounded by a

circumstellar cloud that obscures its core

from view

(D) A star that began its life with a mass greater

than 6 M⊙, has just recently exhausted its

nuclear fuel, and is in the process of releasing

massive amounts of gravitational energy

(E) A star that began its life with a mass of

5.5 M⊙, has yet to exhaust its nuclear fuel,

and exhibits a rate of mass loss similar to

that of IRC+10216

―Popular art‖ has a number of meanings, impossible to

define with any precision, which range from folklore to

junk. The poles are clear enough, but the middle tends to

blur. The Hollywood Western of the 1930‘s, for example,

has elements of folklore, but is closer to junk than to high

art or folk art. There can be great trash, just as there is bad

high art. The musicals of George Gershwin are great

popular art, never aspiring to high art. Schubert and Brahms,

however, used elements of popular music—folk themes—in

works clearly intended as high art. The case of Verdi is a

different one: he took a popular genre—bourgeois

melodrama set to music (an accurate definition of

nineteenth-century opera)—and, without altering its

fundamental nature, transmuted it into high art. (133 words)

122

6. The author refers to Schubert and Brahms in order

to suggest

(A) that their achievements are no less substantial

than those of Verdi

(B) that their works are examples of great trash

(C) the extent to which Schubert and Brahms

influenced the later compositions of Verdi

(D) a contrast between the conventions of

nineteenth-century opera and those of

other musical forms

(E) that popular music could be employed in

compositions intended as high art

7. On turning 65 years old, everyone living in the town of

Malton becomes eligible to receive a card that

guarantees discounts on most goods and services sold

in the town. Census records for 1990 show that 2,

450 inhabitants of Malton turned 64 in that year. Yet .

in 1991 over 3,000 people applied for and properly

received discount cards. So clearly some of Malton's

population growth between 1990 and 1992 must be

attributable to migration into the city by people in

their mid -60's

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Which of the following is an assumption on which the

argument depends?

(A) The town of Malton has no complete census

records for 1991.

(B) The overall size of the population of Malton grew

by over 500 during 1990.

(C) Fewer people applied for and received discount

cards in 1991 than did so in 1992.

(D) Among the people 65 years old or older who

moved into Malton in 1991. there was no one

who did not apply for a discount card .

(E) In general. people who applied for and received

discount cards in 1991 first became eligible to do

so in that year

One of the questions of interest in the study of the

evolution of spiders is whether the weaving of orb webs

evolved only once or several times. About half the

35,000 known kinds of spiders make webs; a third of the

web weavers make orb webs. Since most orb weavers

belong either to the Araneidae or the Uloboridae

families, the origin of the orb web can be determined

only by ascertaining whether the families are related.

Recent taxonomic analysis of individuals from both

families indicates that the families evolved from different

ancestors, thereby contradicting Wiehle‘s theory. This

theory postulates that the families must be related, based

on the assumption that complex behavior, such as web

building, could evolve only once. According to Kullman,

web structure is the only characteristic that suggests a

relationship between families. The families differ in

appearance, structure of body hair, and arrangement

of eyes. Only Uloborids lack venom glands. Further

identification and study of characteristic features will

undoubtedly answer the question of the evolution of

**For the following question, consider each of the**

**choices separately and select all that apply**

9. According to the passage, members of the Araneidae

family can be distinguished from members of the

Uloboridae family by all of the following

A the presence of venom glands

B the structure of their body hair

C the arrangement of their eyes

10. Which of the following statements, if true, most

weakens Wiehle‘s theory that complex behavior

could evolve only once?

(A) Horses, introduced to the New World by the

Spaniards, thrived under diverse climatic

conditions.

(B) Plants of the Palmaceae family, descendants of

a common ancestor, evolved unique seed

forms even though the plants occupy similar

habitats throughout the world.

the orb web.

(172 words)

(C) All mammals are descended from a small,

rodentlike animal whose physical characteris-

tics in some form are found in all its descen-

8. The primary purpose of the passage is to

(A) settle the question of whether orb webs evolved

once or more than once

(B) describe scientific speculation concerning an

issue related to the evolution of orb webs

(C) analyze the differences between the character-

istic features of spiders in the Araneidae and

Uloboridae families

(D) question the methods used by earlier investiga-

tors of the habits of spiders

(E) demonstrate that Araneidae spiders are not

related to Uloboridae spiders

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dants.

(D) Plants in the Cactaceae and Euphorbiaceae

families, although they often look alike and

have developed similar mechanisms to meet

the rigors of the desert, evolved indepen-

dently.

(E) The Cuban anole, which was recently intro-

duced in the Florida wilds, is quickly

replacing the native Florida chameleon

because the anole has no competitors.

***Exercise 22***

Historically, a cornerstone of classical empiricism has

been the notion that every true generalization must be

confirmable by specific observations. In classical

empiricism, the truth of ―All balls are red,‖ for example, is

assessed by inspecting balls; any observation of a *non* red

ball refutes unequivocally the proposed generalization.

For W.V.O. Quine, however, this constitutes an overly

―narrow‖ conception of empiricism. ―All balls are red,‖ he

maintains, forms one strand within an entire web of

statements (our knowledge); individual observations can be

referred only to this web as a whole. As new observations

are collected, he explains, they must be integrated into the

web. Problems occur only if a contradiction develops

between a new observation, say, ―That ball is blue,‖ and the

preexisting statements. In that case, he argues, *any*

statement or combination of statements (not merely the

―offending‖ generalization, as in classical empiricism) can

be altered to achieve the fundamental requirement, a system

free of contradictions, even if, in some cases, the alteration

consists of labeling the new observation a ―hallucination.‖

(172 words)

1. According to Quine‘s conception of empiricism, if a

new observation were to contradict some statement

already within our system of knowledge, which of

the following would be true?

(A) The new observation would be rejected as

untrue.

(B) Both the observation and the statement in our

system that it contradicted would be

discarded.

(C) New observations would be added to our web

of statements in order to expand our system

of knowledge.

(D) The observation or some part of our web of

statements would need to be adjusted to

resolve the contradiction.

(E) An entirely new field of knowledge would be

created.

**For the following question, consider each of the**

**choices separately and select all that apply**

2. It can be inferred from the passage that Quine

considers classical empiricism to be ―overly

‗narrow‘ ‖for which of the following reasons?

A Classical empiricism requires that our system

of generalizations be free of contradictions.

B Classical empiricism demands that in the case

of a contradiction between an individual

observation and a generalization, the

generalization must be abandoned.

C Classical empiricism asserts that every observation

will either confirm an existing generalization

or initiate a new generalization.

125

Shergottites, the name given to three anomalous

achondrites (igneous meteorites lacking chondrules) so far

discovered on Earth, present scientists with a genuine

enigma. Shergottites crystallized from molten rock less

than 1.1 billion years ago (some 3.5 billion years later than

typical achondrites) and were presumably ejected into

space when an object impacted on a body similar in

chemical composition to Earth. While some scientists

speculate that shergottites derive from Io (a volcanically

active moon of Jupiter), recent measurements suggest that

since Io‘s surface is rich in sulfur and sodium, the chemical

composition of its volcanic products would probably be

unlike that of the shergottites. Moreover, any fragments

dislodged from Io by interbody impact would be unlikely

to escape the gravitational pull of Jupiter.

The only other logical source of shergottites is Mars.

Space-probe photographs indicate the existence of giant

volcanoes on the Martian surface. From the small number of

impact craters that appear on Martian lava flows, one can

estimate that the planet was volcanically active as recently

as a half-billion years ago—and may be active today.

(178 words)

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3. The passage provides information to answer which

of the following questions?

(A) What is the precise age of the solar system?

(B) How did shergottites get their name?

(C) What are the chemical properties shared by

shergottites and Martian soils?

(D) How volcanically active is the planet Jupiter?

(E) What is a major feature of the Martian surface?

**For the following question, consider each of the**

**choices separately and select all that apply**

4. It can be inferred from the passage that each of the

following is a consideration in determining whether

a particular planet is a possible source of shergottites

that have been discovered on Earth

A strength of the planet‘s field of gravity

B proximity of the planet to its moons

C chemical composition of the planet‘s surface

Scientists have sought evidence of long-term solar

periodicities by examining indirect climatological data,

such as fossil records of the thickness of ancient tree rings.

These studies, however, failed to link unequivocally

terrestrial climate and the solar-activity cycle, or even to

confirm the cycle's past existence.

5. It can be inferred from the passage that studies

attempting to use tree-ring thickness to locate possible

links between solar periodicity and terrestrial climate are

based on which of the following assumptions?

(A) The solar-activity cycle existed in its present form

during the time period in which the tree

rings grew.

(B) The biological mechanisms causing tree growth

are unaffected by short-term weather pat terns.

(C) Average tree-ring thickness varies from species

to species.

(D) Tree-ring thicknesses reflect changes in terrestrial

climate.

(E) Both terrestrial climate and the solar-activity

cycle randomly affect tree-ring thickness.

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In *Raisin in the Sun*, Lorraine Hansberry does not reject

integration or the economic and moral promise of the

American dream; rather, she remains loyal to this dream

while looking, realistically, at its incomplete realization.

Once we recognize this dual vision, we can accept the

play's ironic nuances as deliberate social commentaries by

6.The author's primary purpose in this passage is to

(A) explain some critics' refusal to consider *Raisin*

*in the Sun* a deliberately ironic play

(B)suggest that ironic nuances ally *Raisin in the*

*Sun* with Du Bois' and Fanon's writings

(C) analyze the fundamental dramatic conflicts in

Hansberry rather than

as the "unintentional" irony that

*Raisin in the Sun*

Bigsby attributes to the work. Indeed a curiously persistent

refusal to credit Hansberry with a capacity for intentional

irony has led some critics to interpret the play's thematic

conflicts as mere confusion, contradiction, or eclecticism.

Isaacs, for example, cannot easily reconcile Hansberry's

intense concern for her race with her ideal of human

reconciliation. But the play's complex view of Black

self-esteem and human solidarity as compatible is no more

"contradictory" than Du Bois' famous, well-considered

ideal of ethnic self-awareness coexisting with human unity,

or Fanon's emphasis on an ideal internationalism that also

(D) justify the inclusion of contradictory elements

in *Raisin in the Sun*

(E) affirm the thematic coherence underlying *Raisin in*

*the Sun*

7. Select the sentence that the author of the passage

reinforce his criticism of responses such as Isaacs' to

*Raisin in the Sun*?

8.The author of the passage would probably consider

which of the following judgments to be most similar

accommodates national identities and roles.

(158 words)

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to the reasoning of critics?

(A) The world is certainly flat; therefore, the person

proposing to sail around it is unquestionably

foolhardy.

(B) Radioactivity cannot be directly perceived;

therefore, a scientist could not possibly control

it in a laboratory.

(C) The painter of this picture could not intend it to

be funny, therefore, its humor must result

from a lack of skill.

(D) Traditional social mores are beneficial to culture;

therefore, anyone who deviates from

them acts destructively.

(E) Filmmakers who produce documentaries deal

exclusively with facts; therefore, a filmmaker

who reinterprets particular events is misleading us.

The transplantation of organs from one individual to

another normally involves two major problems: (1) organ

rejection is likely unless the transplantation antigens of

both individuals are nearly identical, and (2) the

introduction of any unmatched transplantation antigens

induces the development by the recipient of donor-specific

lymphocytes that will produce violent rejection of further

transplantations from that donor. However, we have found

that, among many strains of rats, liver transplants are never

rejected, and that they even induce a state of donor-specific

unresponsiveness. Our hypothesis is that (1) many strains

of rats simply cannot mount a sufficiently vigorous

destructive immune-response (using lymphocytes) to

outstrip the liver‘s relatively great capacity to protect itself

from immune-response damage and that (2) the systemic

unresponsiveness observed is due to concentration of the

recipient‘s donor-specific lymphocytes at the site of the

9 The primary purpose of the passage is to treat the

accepted generalizations about organ transplantation in

which of the following ways?

(A) Explicate their main features

(B) Suggest an alternative to them

(C) Examine their virtues and limitations

(D) Criticize the major evidence used to support them

(E) Present findings that qualify them

10. Which of the following new findings about strains

of rats that do not normally reject liver transplants,

if true, would support the authors‘ hypothesis?

I. Stomach transplants are accepted by the

recipients in all cases.

II. Increasing the strength of the recipient‘s

immune-response reaction can induce

liver transplant.

(138 words)

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liver-transplant rejection.

III. Organs from any other donor can be transplanted

without rejection after liver transplantation.

IV. Preventing lymphocytes from being concentrated

at the liver transplant produces acceptance of skin

transplants.

(A) II only

(B) I and III only

(C) II and IV only

(D) I, II, and III only

(E) I, III, and IV only

***Exercise 23***

The common belief of some linguists that each language

is a perfect vehicle for the thoughts of the nation speaking

it is in some ways the exact counterpart of the conviction of

the Manchester school of economics that supply and

demand will regulate everything for the best. Just as

economists were blind to the numerous cases in which the

law of supply and demand left actual wants unsatisfied, so

also many linguists are deaf to those instances in which the

very nature of a language calls forth misunderstandings in

everyday conversation, and in which, consequently, a word

has to be modified or defined in order to present the idea

intended by the speaker: "He took his stick-no, not John's,

but his own." No language is perfect, and if we admit this

truth, we must also admit that it is not unreasonable to

investigate the relative merits of different languages or of

1.The primary purpose of the passage is to

(A) analyze an interesting feature of the English

language

(B) refute a belief held by some linguists

(C) show that economic theory is relevant to

linguistic study

(D) illustrate the confusion that can result from the

improper use of language

(E) suggest a way in which languages can be made

more nearly perfect

**For the following question, consider each of the**

**choices separately and select all that apply**

2. The misunderstanding presented by the author in

the passage is similar to which of the following?

different details in languages.

( 155 words)

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A X uses the word "you" to refer to a group, but Y

thinks that X is referring to one person only.

B X mistakenly uses the word "anomaly"

to refer to a typical example, but Y knows that

"anomaly" means "exception."

C X uses the word "bachelor" to mean "unmarried

man," but Y mistakenly thinks that bachelor means

"unmarried woman."

3.In presenting the argument, the author does all of

the following EXCEPT

(A) give an example

(B) draw a conclusion

(C) make a generalization

(D) make a comparison

(E) present a paradox

Currently, there are two models of solar activity. The

first supposes that the Sun's internal motions (caused by

rotation and convection) interact with its large-scale

magnetic field to produce a dynamo, a device in which

mechanical energy is converted into the energy of a

magnetic field. In short, the Sun's large-scale magnetic

field is taken to be self-sustaining, so that the solar-

activity cycle it drives would be maintained with little

overall change for perhaps billions of years. The

alternative explanation supposes that the Sun's large-scale

magnetic field is a remnant of the field the Sun acquired

when it formed, and is not sustained against decay. In this

model, the solar mechanism dependent on the Sun's

magnetic field runs down more quickly. Thus, the

characteristics of the solar-activity cycle could be

expected to change over a long period of time.

(140 words)

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4.Which of the following statements about the two

models of solar activity, as they are described in the

passage, is accurate?

(A) In both models cyclical solar activity is regarded

as a long-lived feature of the Sun, persisting

with little change over billions of years.

(B) In both models the solar-activity cycle is

hypothesized as being dependent on the

large-scale solar magnetic field.

(C) In one model the Sun's magnetic field is

thought to play a role in causing solar activity,

whereas in the other model it is not.

(D) In one model solar activity is presumed to be

unrelated to terrestrial phenomena, whereas

in the other model solar activity is thought to

have observable effects on the Earth.

(E) In one model cycles of solar activity with period-

icities longer than a few decades arc

considered to be impossible, whereas in the other

model such cycles are predicted.

Like most other coastal towns in Norway, the town of

Stavanger was quiet and peaceful until the early 1960's,

when it became Norway's center for offshore oil

exploration. Between then and now, violent crime and

vandalism in Stavanger have greatly increased.

Stavanager's social problems probably resulted from the

oil boom, since violent crime and vandalism have

remained low in coastal towns in Norway that have had

no oil boom.

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5. Which of the following most accurately describes the

method of reasoning employed in the argument?

(A) Arguing that a circumstance is not a precondition

for a phenomenon on the grounds that the

phenomenon sometimes occurs where the

circumstance is not present

(B) Arguing that a circumstance is a cause of a

phenomenon on the grounds that the

phenomenon has not occurred where the

circumstance is not present

(C) Arguing that a particular thing cannot have

caused a phenomenon because that thing was not

present before the phenomenon occurred

(D) Attempting to establish a claim by arguing that

the denial of the claim is inconsistent with the

observed facts

(E) Attempting to establish that certain circumstances

that would have had to occur for a particular

explanation to be correct could not have occurred

Modern archaeological finds can still contribute

much to the study of ancient literature. For example, forty

years ago a survey of the early Greek dramatist

Aeschylus' plays would have started with *The Suppliant*

*Women.* Many factors internal to the play, but perhaps

most especially the prominence of the chorus, led

scholars to consider it one of Aeschylus' earlier works.

The consensus was that here was a drama truly reflecting

an early stage in the evolution of tragedy out of choral

lyric. The play was dated as early as the 490's B.C., in

any event, well before Aeschylus' play *The Persians* of

472 B.C. Then, in 1952, a fragment of papyrus found at

Oxyrhynchus was published. The fragment announced

that Aeschylus won first prize with his Danaid tetralogy,

of which *The Suppliant Women* is the opening play, and

defeated Sophocles in the process. Sophocles did not

compete in any dramatic contest before 468 B.C., when

he won his first victory. Hence, the Danaid tetralogy must

6. According to the passage, in the absence of definite

knowledge concerning the dates of composition of

ancient literary works, literary historians do which

of the following when trying to establish the

chronology of an author's work?

(A) Make assumptions about a single work's date

of composition if such assumptions would

not seriously affect interpretations of other

works by the same author.

(B) Draw inferences concerning the date of a

work's composition based on evidence internal

to that work and on the author's other works.

(C) Ignore the date of a work's composition which

is supplied by archaeological research when

literary factors internal to the work contradict

that date.

(D) Refrain from speculation concerning a work's

be put after 468 B.C.

(169 words)

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date of composition unless archaeological

finds produce information concerning it.

(E) Estimate the date of a work's composition

without attempting to relate it to the author's

development as an artist.

As Gilbert White, Darwin, and others observed long

ago, all species appear to have the innate capacity to

increase their numbers from generation to generation. The

task for ecologists is to untangle the environmental and

biological factors that hold this intrinsic capacity for

population growth in check over the long run. The great

variety of dynamic behaviors exhibited by different

populations makes this task more difficult: some

populations remain roughly constant from year to year;

others exhibit regular cycles of abundance and scarcity; still

others vary wildly, with outbreaks and crashes that are in

some cases plainly correlated with the weather, and in other

cases not.

To impose some order on this kaleidoscope of patterns,

one school of thought proposes dividing populations into

two groups. These ecologists posit that the relatively steady

populations have "density- dependent" growth parameters;

In order to understand the nature of the ecologist's

investigation, we may think of the density-dependent

effects on growth parameters as the "signal" ecologists

are trying to isolate and interpret, one that tends to make

the population increase from relatively low values or

decrease from relatively high ones, while the density-

independent effects act to produce "noise" in the population

dynamics. For populations that remain relatively constant,

or that oscillate around repeated cycles, the signal can be

fairly easily characterized and its effects described, even

though the causative biological mechanism may remain

unknown. For irregularly fluctuating populations, we are

likely to have too few observations to have any hope of

extracting the signal from the overwhelming noise. But it

now seems clear that all populations are regulated by a

mixture of density- dependent and density-independent

effects in varying proportions.

that is, rates of birth, death, and migration which depend

strongly on population density. The highly varying

populations have "density-independent" growth parameters,

with vital, rates buffeted by environmental events; these

rates fluctuate in a way that is wholly independent of

population density.

This dichotomy has its uses, but it can cause problems

if taken too literally. For one thing, no population can be

driven entirely by density-independent factors all the time.

No matter how severely or unpredictably birth, death and

migration rates may be fluctuating around their long-term

averages, if there were no density-dependent effects, the

population would, in the long run, either increase or

decrease without bound (barring a miracle by which gains

and losses canceled exactly). Put another way, it may be

that on average 99 percent of all deaths in a population

arise from density-independent causes, and only one

percent from factors varying with density. The factors

making up the one percent may seem unimportant, and

their cause may be correspondingly hard to determine. Yet,

whether recognized or not, they will usually determine the

long-term average population density.

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7.The author of the passage is primarily concerned with

(A) discussing two categories of factors that control

population growth and assessing their relative

importance

(B) describing how growth rates in natural popula-

tions fluctuate over time and explaining why

these changes occur

(C) proposing a hypothesis concerning population

sizes and suggesting ways to test it

(D) posing a fundamental question about environ-

mental factors in population growth and pre-

senting some currently accepted answers

(E) refuting a commonly accepted theory about

population density and offering a new alter-

native

8. Select the sentence in the passage that presents the

author‘s attitude toward the dichotomy discussed in the

second paragraph.

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9.Which of the following statements can be inferred

from the last paragraph?

(A) For irregularly fluctuating populations, doubling

the number of observations made will

probably result in the isolation of density-

dependent effects.

(B) Density-dependent effects on population

dynamics do not occur as frequently as do

density-independent effects.

(C) At present, ecologists do not understand any

of the underlying causes of the density-

dependent effects they observe in population

dynamics..

(D) Density-dependent effects on growth parameters

are thought to be caused by some sort of

biochemical "signaling" that ecologists hope

eventually to understand.

(E) It is sometimes possible to infer the existence of

a density-dependent factor controlling population

growth without understanding its

causative mechanism.

**For the following question, consider each of the**

**choices separately and select all that apply**

10. .According to the passage, all of the following

behaviors have been exhibited by different

populations

A roughly constant population levels from year to year

B regular cycles of increases and decreases in numbers

C erratic increases in numbers correlated with the

weather

***Exercise 24***

Excavations at a Mayan site have uncovered jewelry

workshops located some distance from the center of the

site on roads radiating outward from the center. Since the

nobility lived only in the area of the center, archaeologists

conclude that these workshops made jewelry, not for the

nobility, but for a middle class that must have been

prosperous enough to afford it.

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1. The archaeologists' argument assumes which of the

following about the artisans who worked in the

workshops'

(A) They were themselves prosperous members of a

middle class.

(B) They lived near their workshops.

(C) Their products were not made from the same

materials as was jewelry for the nobility.

(D) They worked full-time at making jewelry and did

not engage in farming

(E) They did not take the jewelry they had made in

the workshops to clients who were members of

the nobility.

Practically speaking, the artistic maturing of the

cinema was the single-handed achievement of David W.

Griffith (1875-1948). Before Griffith, photography in

dramatic films consisted of little more than placing the

actors before a stationary camera and showing them in

full length as they would have appeared on stage. From

the beginning of his career as a director, however, Griffith,

because of his love of Victorian painting, employed

composition. He conceived of the camera image as

having a foreground and a rear ground, as well as the

middle distance preferred by most directors. By 1910 he

was using close-ups to reveal significant details of the

scene or of the acting and extreme long shots to achieve a

sense of spectacle and distance. His appreciation of the

camera‘s possibilities produced novel dramatic effects.

(131 words)

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2. Select the sentence in which the author asserts that

Griffith played an important role in the development of

the cinema.

3. The author‘s attitude toward photography in the

cinema before Griffith can best be described as

(A) sympathetic

(B) nostalgic

(C) amused

(D) condescending

(E) hostile

Because of its accuracy in outlining the Earth's

subsurface, the seismic-reflection method remains the most

important tool in the search for petroleum reserves. In field

practice, a subsurface is mapped by line arranging a series of

wave-train sources, such as small dynamite explosions, in a

grid pattern. As each source is activated, it generates a

wave train that moves downward at a speed determined

**For the following question, consider each of the**

**choices separately and select all that apply**

4. According to the passage, in the seismic-reflection

method which of the following have a significant

effect on the signal detected by the seismic

instruments

A presence of unrelated wave trains

uniquely by the rock's elastic characteristics. As rock

interfaces are crossed, the elastic characteristics

encountered generally change abruptly, which causes part

of the energy to be reflected back to the surface, where it is

B

C

placement of the seismic instruments

properties of rocks through which the wave

train has traveled

recorded by seismic instruments. The seismic records must

be processed to correct for positional differences between

the source and the receiver, for unrelated wave trains, and

for multiple reflections from the rock interfaces. Then the

data acquired at each of the specific source locations are

combined to generate a physical profile of the subsurface,

which can eventually be used to select targets for drilling.

(162 words)

5. It can be inferred from the passage that the seismic-

reflection method would be likely to yield an inaccu-

rate physical profile of the subsurface in which of

the following circumstances?

(A) If the speed at which the wave train moved

downward changed

(B) If the receiver were not positioned directly at

the wave-train source

(C) If the rock on one side of a rock interface had

similar elastic characteristics to those of the

rock on the other side

(D) If the seismic records obtained for the different

sources in a grid were highly similar to each other

(E) If there were no petroleum deposits beneath the

area defined by the grid of wave-train sources

6. Which of the following best describes the

organization of the passage?

(A) A method is criticized, and an alternative is

suggested.

(B) An illustration is examined, and some errors are

exposed.

(C) An assertion is made, and a procedure is

outlined.

(D) A series of examples is presented, and a

conclusion is drawn.

(E)

A hypothesis is advanced, and supporting

evidence is supplied.

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Paradoxically, with all of our natural, intuitive,

commonsense capacity to grasp human relations, the

science of human relations has been one of the last to

develop. Different explanations of this paradox have been

suggested. One is that science would destroy the vain and

pleasing illusions people have about themselves; but we

might ask why people have always loved to read

pessimistic, debunking writings, from Ecclesiastes to

Freud. It has also been proposed that just because we

know so much about people intuitively, there has been

less incentive for studying them scientifically; why

should one develop a theory, carry out systematic

observations, or make predictions about the obvious?

(107 words)

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7. The author refers to people who are attracted to

"pessimistic, debunking writings" in order to support

which of the following ideas?

(A) Interesting books about human relations are

typically pessimistic.

(B) People tend to ignore scientific explanations

of human relations.

(C) People rarely hold pleasing illusions about

themselves.

(D) A scientific approach human relations

would undermine the pleasing illusions people

hold of themselves.

(E) It is doubtful that the science of human relations

developed slowly because of a desire

to maintain pleasing illusions.

8. In the context in which it appears, "paradox" most

nearly means

A diametrical opposition

B unintended irony

C stark dichotomy

D exact counterpoint

E contradiction to common sense

Why during sickness should body temperature of

warm-blooded animal rise? It has long been known that the

level of serum iron in animals falls during infection.

Garibaldi first suggested a relationship between fever and

iron. He found that microbial synthesis of siderophores --

substances that bind iron -- in bacteria of the genus

*Salmonella* declined at environmental temperatures above

37°C and stopped at 40.3°C. Thus, fever would make it

more difficult for an infecting bacterium to acquire iron and

thus to multiply. Cold-blooded animals were used to test

this hypothesis. Kluger reported that of iguanas infected

with the potentially lethal bacterium *A. hydrophilia*, more

survived at temperatures of 42°C than at 37°C, even though

healthy animals prefer the lower temperature. When

animals at 42°C were injected with an iron solution,

however, mortality rates increased significantly.

(135 words)

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9. According to the passage, Garibaldi determined

which of the following?

(A) That serum iron is produced through microbial

synthesis

(B) That microbial synthesis of siderophores in

warm-blooded animals is more efficient at

higher temperatures.

(C) That only iron bound to other substances can

be used by bacteria.

(D) That there is a relationship between the

synthesis of siderophores in bacteria of the genus

*Salmonella* and environmental temperature.

(E) That bacteria of the genus *Salmonella* require

iron as a nutrient.

10. If it were to be determined that similar phenomena

occur in warm-blooded animals, which of the

following, assuming each is possible, is likely to be the

most effective treatment for warm-blooded animals

with bacterial infections?

(A) Administering a medication that lowers the

animals' body temperature

(B) Injecting the animals with an iron solution

(C) Administering a medication that makes serum

iron unavailable to bacteria

(D) Providing the animals with reduced-iron diets

(E) Keeping the animals in an environment with

temperatures higher than 37°C

***Exercise 25***

Since 1953, many experimental attempts to synthesize

the chemical constituents of life under "primitive Earth

conditions" have demonstrated that a variety of the

complex molecules currently making up living organisms

could have been present in the early ocean and atmosphere,

with only one limitation: such molecules are synthesized

far less readily when oxygen-containing compounds

dominate the atmosphere. Therefore some scientists

postulate that the Earth's earliest atmosphere, unlike that of

today, was dominated by hydrogen, methane, and ammonia.

From these studies, scientists have concluded that the

surface of the primitive Earth was covered with oceans

containing the molecules fundamental to life. Although, at

present, scientists cannot explain how these relatively small

molecules combined to produce larger, more complex

molecules, some scientists have precipitously ventured

hypotheses that attempt to explain the development, from

lager molecules, of the earliest self-duplicating organisms.

(138 words)

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1. According to the passage, which of the following

can be inferred about the process by which the

chemical constituents of life were synthesized under

primitive Earth conditions?

(A) The synthesis is unlikely to occur under current

atmospheric conditions

(B) The synthesis is common in modern laboratories.

(C)The synthesis occurs more readily in the

atmosphere than in the ocean.

(D)The synthesis easily produces the most complex

organic molecules.

(E)The synthesis is accelerated by the presence of

oxygen-containing compounds.

2.It can be inferred from the passage that "some scien-

tists" assume which of the following concerning "

larger, more complex molecules"

(A) The earliest atmosphere was forward primarily

of these molecules.

(B) Chemical processes involving these molecules

proceeded much more slowly under primitive

Earth conditions.

(C) The presence of these molecules would necessarily

precede the existence of simple organisms.

(D) Experimental techniques will never be sufficiently

sophisticated to produce in the laboratory simple

organisms from these chemical constituents.

(E) Explanations could easily be developed to

explain how simple molecules combined to

form these more complex ones.

It is frequently assumed that the mechanization of work

has a revolutionary effect on the lives of the people who

operate the new machines and on the society into which the

machines have been introduced. For example, it has been

suggested that the employment of women in industry took

them out of the household, their traditional sphere, and

fundamentally altered their position in society. In the

nineteenth century, when women began to enter factories,

Jules Simon, a French politician, warned that by doing so,

women would give up their femininity. Friedrich Engels,

however, predicted that women would be liberated from the

"social, legal, and economic subordination" of the family by

blue-collar work. Fundamentally, however, the conditions

under which women work have changed little since before

the Industrial Revolution: the segregation of occupations by

gender, lower pay for women as a group, jobs that require

relatively low levels of skill and offer women little

opportunity for advancement all persist, while women's

household labor remains demanding. Recent historical

investigation has led to a major revision of the notion that

technology is always inherently revolutionary in its effects

on society. Mechanization may even have slowed any

change in the traditional position of women both in the

labor market and in the home.

technological developments that made possible the

recruitment of "the whole female sex into public industry."

Observers thus differed concerning the social desirability of

mechanization's effects, but they agreed that it would

transform women's lives.

Historians, particularly those investigating the history

of women, now seriously question this assumption of

transforming power. They conclude that such dramatic

technological innovations as the spinning jenny, the sewing

machine, the typewriter, and the vacuum cleaner have not

resulted in equally dramatic social changes in women's

economic position or in the prevailing evaluation of

women's work. The employment of young women in textile

mills during the Industrial Revolution was largely an

extension of an older pattern of employment of young,

single women as domestics. It was not the change in office

technology, but rather the separation of secretarial work,

previously seen as an apprenticeship for beginning

managers, from administrative work that in the 1880's

created a new class of "dead-end" jobs, thenceforth

considered "women's work." The increase in the numbers

of married women employed outside the home in the

twentieth century had less to do with the mechanization of

housework and an increase in leisure time for these women

than it did with their own economic necessity and with high

marriage rates that shrank the available pool of single

women workers, previously, in many cases, the only

women employers would hire.

Women's work has changed considerably in the past

200 years, moving from the household to the office or the

factory, and later becoming mostly white-collar instead of

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3.Which of the following statements best summarizes

the main idea of the passage?

(A) The effects of the mechanization of women's

work have not borne out the frequently held

assumption that new technology is inherently

revolutionary.

(B) Recent studies have shown that mechanization

revolutionizes a society's traditional values

and the customary roles of its members.

(C) Mechanization has caused the nature of

women's work to change since the Industrial

Revolution.

(D) The mechanization of work creates whole new

classes of jobs that did not previously exist.

(E) The mechanization of women's work, while

extremely revolutionary it its effects, has not,

on the whole, had the deleterious effects that

some critics had feared.

4.It can be inferred front the passage that the author

would consider which of the following to be an indi-

cation of a fundamental alteration in the conditions

of women's work?

(A) Statistics showing that the majority of women

now occupy white-collar positions

(B) Interviews with married men indicating that

they are now doing some household tasks

(C) Surveys of the labor market documenting the

recent creation of a new class of jobs in electronics

in which women workers outnumber men four to

one

(D) Census results showing that working women's

wages and salaries are, on the average, as high as

those of working men

(E) Enrollment figures from universities demonstrating

that increasing numbers of young women are

choosing to continue their education beyond the

undergraduate level

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**For the following question, consider each of the**

**choices separately and select all that apply**

5. Which of the following statement about many

employers before the twentieth century are NOT

implied in the passage?

A They did not employ women in factories.

B They tended to employ single rather than married

women.

C They hired women only when qualified men

were not available to fill the open positions.

6.Which of the following best describes the function of

the concluding sentence of the passage?

(A) It sums up the general points concerning the

mechanization of work made in the passage

as a whole.

(B) It draws a conclusion concerning the effects

of the mechanization of work which goes

beyond the evidence presented in the passage

as a whole.

(C) It restates the point concerning technology

made in the sentence immediately preceding it.

(D) It qualifies the author's agreement with scholars

who argue for a major revision in the assess

ment of the impact of mechanization on society

(E) It suggests a compromise between two seemingly

contradictory views concerning the effects

of mechanization on society.

Over the last 40 years there has been a great increase not

only in the number of agricultural pesticides in use but also

in the care and sophistication with which they are used by

farmers. Nevertheless, the proportion of agricultural crops

lost to certain pests worldwide has increased over the same

period, even when the pests concerned have not developed

resistance to existing pesticides.

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7. Which of the following, if true. best explains how

improvements in pesticide use have been

accompanied by greater losses to certain pests?

(A) Some dangerous but relatively ineffective

pesticides common 40 years ago are no longer in

widespread use.

(B) As pesticides have become increasingly pest-

specific, controlling certain pests with pesticides

has turned out to cost more in many cases than

the value of crop losses caused by those pests.

(C) Because today's pesticides typically have more

specific application conditions than did

pesticides in use 40 years ago, today's farmers

observe their fields more closely than did farmers

40 years ago.

(D) Certain pest-control methods that some farmers

use today do not involve the use of chemical

pesticides but are just as effective in eliminating

insect pests as those that do.

(E) Forty years ago, much less was known about the

effects of pesticides on humans and other

mammalian species than is now known.

Researchers are finding that in many ways an individual

bacterium is more analogous to a component cell of a

multicellular organism than it is to a free-living,

autonomous organism. *Anabaena*, a freshwater bacteria is a

case in point. Among photosynthetic bacteria, *Anabaena* is

unusual: it is capable of both photosynthesis and nitrogen

fixation. Within a single cell, these two biochemical

processes are incompatible: oxygen produced during

photosynthesis, inactivates the nitrogenase required for

nitrogen fixation. In *Anabaena* communities, however,

these processes can coexist. When fixed nitrogen

compounds are abundant, *Anabaena* is strictly

photosynthetic and its cells are all alike. When nitrogen

levels are low, however, specialized cells called heterocysts

are produced which lack chlorophyll (necessary for

photosynthesis) but which can fix nitrogen by converting

nitrogen gas into a usable form. Submicroscopic channels

develop which connect the heterocyst cells with the

photosynthetic ones and which are used for transferring

cellular products between the two kinds of *Anabaena* cells.

(156 words)

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8.It can be inferred from the passage that cell differen-

tiation within *Anabaena* is regulated by the

(A) amount of oxygen *Anabaena* cells produce

(B) season of the year

(C) amount of fixed nitrogen compounds available

(D) number of microscopic channels uniting

*Anabaena* cells

(E) amount of chlorophyll in *Anabaena* cells

9.The author uses the example of *Anabaena* to illustrate

the

(A) uniqueness of bacteria among unicellular organ-

isms

(B) inadequacy of an existing view of bacteria

(C) ability of unicellular organisms to engage in

photosynthesis

(D) variability of a freshwater bacteria

(E) difficulty of investigating even the simplest

unicellular organisms

Scholars often fail to see that music played an important

role in the preservation of African culture in the United States.

They correctly note that slavery stripped some cultural

elements from Black people-their political and economic

systems-but they underestimate the significance of music in

sustaining other African cultural values. African music, unlike

10. In the argument given , the two highlighted portions

play which of the following roles?

A The first sentence introduces the topic of the

passage and the last one summarizes the passage.

B The first sentence presents a thesis and the last one

further develops the thesis.

the music of some other cultures, was based on a total vision

of life in which music was not an isolated social domain. In

African culture music was pervasive, serving not only religion,

C

D

The first sentence summarizes the main idea of the

passage and the last one paraphrases it literally.

The first sentence presents a context for the

but all phases of life, including birth, death, work, and play.

Music, like art in general, was so inextricably a part of African

culture that it became a crucial means of preserving the

culture during and after the dislocations of slavery.

(126 words)

146

discussion of the passage and the last one

summarizes the discussion.

E The first sentence presents the negative thesis of the

passage and the last one presents the positive thesis.

***Exercise 26***

1. Which of the following, if true, most strengthens the

Authorities in California required drivers to use their

headlights on a certain road during the daytime as well

as at night and found that annual accident rates on the

road fell 15 percent from the previous level. They

concluded that applying the daytime rule statewide

would lead to a similar reduction in accidents.

147

authorities' argument?

(A) Because an alternate route became available, the

volume of traffic on the test road decreased during

the test period.

(B) Drivers were informed of the requirement to use

their headlights on the test road by means of a

series of three conspicuous signs in each direction

of travel.

(C) Under certain conditions, among them fog and

heavy rain, most drivers in California already use

their headlights during the daytime.

(D) Full-scale application of the daytime rule would

cause headlight bulbs to burn out sooner than

they currently do and thus to require more

frequent replacement.

(E) The test road was selected to include a great

variety of the sorts of road conditions that drivers

in California are likely to encounter.

It has long been known that during an El Nino, two

conditions exist: (1) unusually warm water extends

along the eastern Pacific, principally along the coasts of

Ecuador and Peru, and (2) winds blow from the west into

the warmer air rising over the warm water in the east.

These winds tend to create a feedback mechanism by

driving the warmer surface water into a "pile" that blocks

the normal upwelling of deeper, cold water in the east and

further warms the eastern water, thus strengthening the

wind still more. The contribution of the recent model is to

show that the winds of an El Nino, which raise sea level in

the cast, simultaneously send a signal to the west lowering

sea level. According to the model, that signal is generated

as a negative Rossby wave, a wave of depressed, or

negative, sea level, that moves westward parallel to the

equator at 25 to 85 kilometers per day.

(158 words)

148

2. According to the passage, which of the following

features is characteristic of an El Nino?

(A) Cold coastal water near Peru

(B) Winds blowing from the west

(C) Random occurrence

(D) Worldwide effects

(E) Short duration

**For the following question, consider each of the**

**choices separately and select all that apply**

3. It can be inferred from the passage that which of

the following would result fairly immediately from

the cessation of the winds of an El Nino?

A Negative Rossby waves would cease to be

generated in the eastern Pacific.

B The sea level in the eastern Pacific would fall.

C The surface water in the eastern Pacific would

again be cooled by being mixed with deep water.

In a recent study, David Cressy examines two central

questions concerning English immigration to New England

in the 1630's: what kinds of people immigrated and why?

Cressy finds that most adult immigrants were skilled in

farming or crafts, were literate, and were organized in

families. Each of these characteristics sharply distinguishes

the 21,000 people who left for New England in the 1630's

from most of the approximately 377,000 English people

who had immigrating, to America by 1700.

With respect to their reasons for immigrating, Cressy

does not deny the frequently noted fact that some of the

immigrants of the 1630's, most notably the organizers and

clergy, advanced religious explanations for departure, but

he finds that such explanations usually assumed primacy

only in retrospect. When he moves beyond the principal

actors, he finds that religious explanations were less

frequently offered and he concludes that most people

immigrated because they were recruited by promises of

material improvement.

(155 words)

149

4. According to the passage, Cressy would agree with

which of the following statements about the orga-

nizers among the English immigrants to New

England in the 1630's?

I. Most of them were clergy.

II. Some of them offered a religious explanation

for their immigration.

III. They did not offer any reasons for their

immigration until some time after they

had immigrated.

IV. They were more likely than the average

immigrant to be motivated by material

considerations.

(A) I only

(B) II only

(C) II and III only

(D) I, III, and IV only

(E) II, III, and IV only

5.The passage suggests that the majority of those

English people who had immigrated to America

by the late seventeenth century were

(A) clergy

(B) young children

(C) organized in families

(D) skilled in crafts

(E) illiterate

Traditionally, pollination by wind has been viewed as

a reproductive process marked by random events in

which the vagaries of the wind are compensated for by

the generation of vast quantities of pollen, so that the

ultimate production of new seeds is assured at the

expense of producing much more pollen than is actually

used. Because the potential hazards pollen grains are

subject to as they are transported over long distances are

enormous, wind-pollinated plants have, in the view above,

compensated for the ensuing loss of pollen through

happenstance by virtue of producing an amount of pollen

that is one to three orders of magnitude greater than the

amount produced by species pollinated by insects.

However, a number of features that are characteristic

of wind-pollinated plants reduce pollen waste. For

example, many wind-pollinated species fail to release

pollen when wind speeds are low or when humid

conditions prevail. Recent studies suggest another way in

which species compensate for the inefficiency of wind

pollination. These studies suggest that species frequently

take advantage of the physics of pollen motion by

generating specific aerodynamic environments within the

immediate vicinity of their female reproductive organs. It

is the morphology of these organs that dictates the pattern

of airflow disturbances through which pollen must travel.

The speed and direction of the airflow disturbances can

combine with the physical properties of a species' pollen

to produce a species-specific pattern of pollen collision on

the surfaces of female reproductive organs. Provided that

these surfaces are strategically located, the consequences

of this combination can significantly increase the

pollen-capture efficiency of a female reproductive organ.

A critical question that remains to be answered is

whether the morphological attributes of the female

reproductive organs of wind-pollinated species are

evolutionary adaptations to wind pollination or are merely

fortuitous. A complete resolution of the question is as yet

impossible since adaptation must be evaluated for each

species within its own unique functional context.

However, it must be said that, while evidence of such

evolutionary adaptations does exist in some species, one

must be careful about attributing morphology to

adaptation. For example, the spiral arrangement of

150

scale-bract complexes on ovule-bearing pine cones, where

the female reproductive organs of conifers are located, is

important to the production of airflow patterns that spiral

over the cone's surfaces, thereby passing airborne pollen

from one scale to the next. However, these patterns

cannot be viewed as an adaptation to wind pollination

because the spiral arrangement occurs in a number of

non-wind-pollinated plant lineages and is regarded as a

characteristic of vascular plants, of which conifers are

only one kind, as a whole. Therefore, the spiral

arrangement is not likely to be the result of a direct

adaptation to wind pollination.

(453 words)

6.The author of the passage is primarily concerned

with discussing

(A) the current debate on whether the morphological

attributes of wind-pollinated plants are

evolutionary adaptations

(B) the kinds of airflow patterns that permit wind-

pollinated plants to capture pollen most effi-

ciently

(C) the ways in which the reproductive processes of

wind-pollinated plants are controlled by

random events

(D) a recently proposed explanation of a way in

which wind-pollinated plants reduce pollen

waste

(E) a specific morphological attribute that permits

one species of wind-pollinated plant to

capture pollen

7. According to the passage, the "aerodynamic

environments" mentioned in the second paragraph,

when they are produced, are primarily determined by

the

(A) presence of insects near the plant

(B) physical properties of the plant's pollen

(C) shape of the plant's female reproductive organs

(D) amount of pollen generated by the plant

(E) number of seeds produced by the plant

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8. The passage suggests that the recent studies cited in the

second paragraph have not done which of the following?

(A) Made any distinctions between different species

of wind-pollinated plants.

(B) Considered the physical properties of the pollen

that is produced by wind-pollinated plants.

(C) Indicated the general range within which plant-

generated airflow disturbances are apt to

occur.

(D) Included investigations of the physics of pollen

motion and its relationship to the efficient

capture of pollen by the female reproductive

organs of wind-pollinated plants.

(E) Demonstrated that the morphological attributes

of the female reproductive organs of wind-

pollinated plants are usually evolutionary

adaptations to wind pollination.

9. It can be inferred from the passage that the claim

that the spiral arrangement of scale-bract complexes

on an ovule-bearing pine cone is an adaptation to

wind pollination would be more convincing if which

of the following were true?

(A) Such an arrangement occurred only in wind-

pollinated plants.

(B) Such an arrangement occurred in vascular

plants as a whole.

(C) Such an arrangement could be shown to be

beneficial to pollen release.

(D) The number of bracts could be shown to have

increased over time.

(E) The airflow patterns over the cone's surfaces

could be shown to be produced by such

arrangements.

Isadora Duncan's masterly writings on the dance reveal

the depth of her determination to create a lyric form of the art

which was free of characterization, storytelling, and the

theatrical exhibition of skills. She wished to discard the

traditional methods and established vocabularies of such dance

forms as ballet and to explore the internal sources of human

expressiveness. She shunned bodily ornamentation and

strove to use only the natural movements of her body,

undistorted by acrobatic exaggeration and stimulated only by

internal compulsion. In her recitals Duncan danced to the music

of Beethoven, Wagner, and Gluck, among others, but,

contrary to popular belief, she made no attempt to visualize or

to interpret the music; rather, she simply relied on it to provide

the inspiration for expressing inner feelings through movement.

(130 words)

152

10. Select the sentence in the passage that implies the

argumentative function which the author mentions

Duncan‘s reliance on music in her recitals to serve.

***Exercise 27***

The more that is discovered about the intricate

organization of the nervous system, the more it seems

remarkable that genes can successfully specify the

development of that system. Human genes contain too

little information even to specify which hemisphere of the

10

alone the hundreds of connections that each neuron

makes. For such reasons, we can assume that there must

be an important random factor in neural development, and

in particular, that errors must and do occur in the

development of all normal brains.

(93 words)

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1. Which of the following best describes the organization

of the paragraph?

(A) A specific case is presented, its details are

analyzed, and a conclusion is drawn from it.

(B) A discovery is announced, its most significant

application is discussed, and possibilities for

the future are suggested.

(C) A generalization is made, specific situations in

which it is applicable are noted, and problems

with it are suggested.

(D) An observation is made, specifics are provided

to support it, and a generalization is derived.

(E) A hypothesis is presented, its implications are

clarified, and applications of it are discussed.

brain each of a human's 10 neurons should occupy, let

Some recent historians have argued that life in the

British colonies in America from approximately 1763 to

1789 was marked by internal conflicts among colonists.

Inheritors of some of the viewpoints of early twentieth-

century Progressive historians such as Beard and Becker,

these recent historians have put forward arguments that

deserve evaluation.

The kind of conflict most emphasized by these

historians is class conflict. Yet with the Revolutionary

War dominating these years, how does one distinguish

class conflict within that larger conflict? Certainly not by

the side a person supported. Although many of these

historians have accepted the earlier assumption that

Loyalists represented an upper class, new evidence

indicates that Loyalists, like rebels, were drawn from all

socioeconomic classes. (It is nonetheless probably true

that a larger percentage of the well-to-do joined the

Loyalists than joined the rebels.) Looking at the rebel side,

we find little evidence for the contention that lower-class

rebels were in conflict with upper-class rebels. Indeed,

the war effort against Britain tended to suppress class

conflicts. Where it did not, the disputing rebels of one or

another class usually became Loyalists. Loyalism thus

operated as a safety valve to remove socioeconomic

discontent that existed among the rebels. Disputes

occurred, of course, among those who remained on the

rebel side, but the extraordinary social mobility of

eighteenth-century American society (with the obvious

exception of slaves) usually prevented such disputes from

hardening along class lines. Social structure was in fact so

fluid --- though recent statistics suggest a narrowing of

economic opportunity as the latter half of the century

progressed --- that to talk about social classes at all

requires the use of loose economic categories such as rich,

poor, and middle class, or eighteenth-century designations

like "the better sort." Despite these vague categories, one

should not claim unequivocally that hostility between

recognizable classes cannot be legitimately observed.

Outside of New York, however, there were very few

instances of openly expressed class antagonism.

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Having said this, however, one must add that there is

much evidence to support the further claim of recent

historians that sectional conflicts were common between

1763 and 1789. The "Paxton Boys" incident and the

Regulator movement are representative examples of the

widespread, and justified, discontent of western settlers

against colonial or state governments dominated by

eastern interests. Although undertones of class conflict

existed beneath such hostility, the opposition was

primarily geographical. Sectional conflict ---which also

existed between North and South ---deserves further

investigation.

In summary, historians must be careful about the kind

of conflict they emphasize in eighteenth-century America.

Yet those who stress the achievement of a general

consensus among the colonists cannot fully understand

that consensus without understanding the conflicts that

had to be overcome or repressed in order to reach it.

(461 words)

2.The author most likely refers to "historians such as

Beard and Becker" in the first paragraph in order to

(A) isolate the two historians whose work is most

representative of the viewpoints of Progressive

historians

(B) emphasize the need to find connections between

recent historical writing and the work of

earlier historians

(C) make a case for the importance of the views

of the Progressive historians concerning

eighteenth-century American life

(D) suggest that Progressive historians were the first

to discover the particular internal conflicts in

eighteenth-century American life mentioned

in the passage

(E) point out historians whose views of history

anticipated some of the views of the recent

historians mentioned in the passage

3.According to the passage, Loyalism during

the American Revolutionary War served the

function of

(A) eliminating the disputes that existed among

those colonists who supported the rebel cause

(B) drawing upper, as opposed to lower, socio-

economic classes away from the rebel cause

(C) tolerating the kinds of socioeconomic discontent

**For the following question, consider each of the**

**choices separately and select all that apply**

4. The passage suggests that the author would be likely

to agree with which of the following statements

about the social structure of eighteenth-century

American society?

A It allowed greater economic opportunity than it did

social mobility.

B It permitted greater economic opportunity prior to 1750

than after 1750.

C It did not contain rigidly defined socioeconomic

divisions.

5.The author suggests which of the following about

the representativeness of colonial or state govern-

ments in America from 1763 to 1789 ?

(A) The governments inadequately represented the

interests of people in western regions.

(B) The governments more often represented class

interests than sectional interests.

(C)The governments were less representative than

they had been before 1763 .

(D)The governments were dominated by the interests

of people of an upper socioeconomic class.

(E) The governments of the northern colonies were

less representative than were the governments

of the southern colonies.

that were not allowed to exist on the rebel side

(D) channeling conflict that existed within a socio-

economic class into the war effort against the

rebel cause

(E) absorbing members of socioeconomic groups

on the rebel side who felt themselves in

contention with members of other socio-

economic groups

155

6. Despite a dramatic increase in the number of people

riding bicycles for recreation in Parkville. a recent

report by the Parkville Department of Transportation

shows that the number of accidents involving

bicycles has decreased for the third consecutive year.

156

Which of the following, if true during the last three years,

best reconciles the apparent discrepancy in the facts

above?

(A) The Parkville Department of Recreation

confiscated abandoned bicycles and sold them at

auction to any interested Parkville residents.

(B) Increased automobile and bus traffic in Parkville

has been the leading cause of the most recent

increase in automobile accidents.

(C) Because of the local increase in the number of

people bicycling for recreation. many out -of

-town bicyclists ride in the Parkville area.

(D) The Parkville Police Department enforced traffic

rules for bicycle riders much more vigorously

and began requiring recreational riders to pass a

bicycle safety course.

(E) The Parkville Department of Transportation

canceled a program that required all bicycles to

be inspected and registered each year.

The Earth's magnetic field is generated as the molten

iron of the Earth's outer core revolves around its solid

inner core; when surges in the molten iron occur, magnetic

tempests are created. At the Earth's surface, these tempests

can be detected by changes in the strength of the Earth's

magnetic field. For reasons not fully understood, the field

itself reverses periodically every million years or so.

Clearly, geophysicists who seek to explain and forecast

changes in the field must understand what happens in the

outer core. Unlike meteorologists, however, they cannot

rely on observations made in their own lifetimes. Whereas

atmospheric storms arise in a matter of hours and last for

days, magnetic tempests develop over decades and persist for

centuries.

7.In the passage, the author is primarily concerned with

(A) analyzing a complicated scientific phenomenon

and its impact on the Earth's surface features

(B) describing a natural phenomenon and the

challenges its study presents to researchers

(C) discussing a scientific field of research and the

gaps in researchers' methodological

approaches to it

(D) comparing two distinct fields of physical science

and the different research methods employed

in each

(E) proposing an explanation for a geophysical

phenomenon and an experiment that could help

confirm that explanation

(121 words)

8. Select the sentence in the passage that implies the

reason why geophysicists seeking to explain magnetic

tempests ought to conduct research on the Earth's outer

core.

157

In *The Women of Mexico City, 1796-1857*, Sylvia

Marina Arrom argues that the status on women in Mexico

City improved during the nineteenth century. According

to Arrom, households headed by females and instances of

women working outside the home were much more

common than scholars have estimated; efforts by the

Mexican government to encourage female education

resulted in increased female literacy; and influential male

writers wrote pieces advocating education, employment,

and increased family responsibilities for women, while

deploring women‘s political and marital inequality.

Mention of the fact that the civil codes of 1870 and 1884

significantly advanced women‘s rights would have further

strengthened Arrom‘s argument.

Arrom does not discuss whether women‘s improved

status counteracted the effects on women of instability in

the Mexican economy during the nineteenth century.

However, this is not so much a weakness in her work as it

is the inevitable result of scholars‘ neglect of this period.

Indeed, such gaps in Mexican history are precisely what

make Arrom‘s pioneering study an important addition to

9. It can be inferred from the passage that Arrom

would agree with which of the following

assertions?

(A) Efforts by the Mexican government to

encourage education for women during the

nineteenth century were hampered by the

economic instability of that period.

(B) The most significant advances in the rights

of Mexican women during the nineteenth

century occurred prior to 1857.

(C) Improvements in the status of women in Mexico

City during the nineteenth century were

accompanied by similar improvements in the

status of women in other large Latin American

cities.

(D) Scholars have in the past accorded the most

significance to nineteenth-century Mexican

literature that supported the status quo in

women‘s political and marital rights.

(E) Scholars have in the past underestimated the

number of households headed by females in

Latin American women‘s history.

(172 words)

158

Mexico City.

10. Which of the following best describes the author‘s

attitude toward Arrom‘s work?

(A) Uncritical approval

(B) Enthusiasm tempered by minor reservations

(C) Praise for her thesis, despite skepticism

regarding the sources of her evidence

(D) Reluctant acceptance, despite lingering doubts

regarding the accuracy of her thesis

(E) Rejection, despite admiration for her attempt to

break new ground in a hitherto neglected field

***Exercise 28***

For women feminist literary critic, the subjectivity

versus objectivity, or critic-as-artist-or-scientist, debate has

special political significance, and her definition will court

special risks whichever side of the issue it favors. If she

defines feminist criticism as objective and scientific, the

definition precludes the critic-as-artist approach and may

impede accomplishment of the utilitarian political

objectives of those who seek to change the academic

establishment. If she defines feminist criticism as creative

and intuitive, privileged as art, then her work becomes

vulnerable to the prejudices of stereotypic ideas about the

ways in which women think, and will be dismissed by

much of the academic establishment.

These questions are political in the sense that the

debate over them will inevitably be less an exploration of

abstract matters in a spirit of disinterested inquiry than an

academic power struggle in which the careers and

professional fortunes of many women scholars -- only now

entering the academic profession in substantial numbers --

will be at stake, and with them the chances for a distinctive

contribution to humanistic understanding, a contribution

that might be an important influence against sexism in our

society.

(186 words)

**For the following question, consider each of the**

**choices separately and select all that apply**

1. The author specifically mentions all of the following

as difficulties that particularly affect women who

are theoreticians of feminist literary criticism

A tendency of a predominantly male academic

establishment to form preconceptions about women

B limitations that are imposed when criticism

is defined as objective and scientific

C likelihood that the work of a woman theoretician

who claims the privilege of art will be viewed

with prejudice by some academics

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2.Which of the following is presented by the author

in support of the suggestion that there is stereo-

typic thinking among members of the academic

establishment?

(A) A distinctively feminist contribution to

humanistic understanding could work

against the influence of sexism among

members of the academic establishment.

(B) Women who define criticism as artistic may

be seen by the academic establishment as

being incapable of critical thinking.

(C) The debate over the role of the literary critic

is often seen as a political one.

(D) Women scholars are only now entering

academia in substantial numbers.

(E) The woman who is a critic is forced to

construct a theory of literary criticism.

3 .It can be inferred that the author would define as

" political" questions (in the second paragraph) that

(A) are contested largely through contentions over

power

(B) are primarily academic in nature and open to

abstract analysis

(C) are not in themselves important

(D) cannot be resolved without extensive debate

(E) will be debated by both men and women

What causes a helix in nature to appear with either a

dextral("right-handed, "or clockwise) twist or a sinistral

("left-handed," or counterclockwise) twist is one of the

most intriguing puzzles in the science of form. Most

spiral-shaped snail species are predominantly dextral. But

at one time, handedness (twist direction of the shell) was

equally distributed within some snail species that have

become predominantly dextral or, in a few species,

predominantly sinistral. What mechanisms, control

handedness and keep left-handedness rare?

It would seem unlikely that evolution should

discriminate against sinistral snails if sinistral and dextral

snails are exact mirror images, for any disadvantage that a

sinistral twist in itself could confer on its possessor is

almost inconceivable. But left- and right-handed snails

are not actually true mirror images of one another. Their

shapes are noticeably different. Sinistral rarity might, then,

be a consequence of possible disadvantages conferred by

these other concomitant structural features. In addition,

perhaps left- and right-handed snails cannot mate with

each other, having incompatible twist directions.

Presumably an individual of the rarer form would have

relative difficulty in finding a mate of the same hand, thus

keeping the rare form rare or creating geographically

separated right- and left-handed populations.

But this evolutionary mechanism combining

dissymmetry, anatomy, and chance does not provide an

adequate explanation of why right-handedness should

have become predominant. It does not explain, for

example, why the infrequent unions between snails of

opposing hands produce fewer offspring of the rarer than

the commoner form in species where each parent

contributes equally to handedness. Nor does it explain

why, in a species where one parent determines

handedness,a brood is not exclusively right- or

left-handed when the offspring would have the same

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genetic predisposition. In the European pond snail

*Lymnaea peregra*, a predominantly dextral species whose

handedness is maternally determined, a brood might be

expected to be exclusively right- or left-handed—and this

often occurs. However, some broods possess a few snails

of the opposing hand, and in predominantly sinistral

broods, the incidence of dextrality is surprisingly high.

Here, the evolutionary theory must defer to a theory

based on an explicit developmental mechanism that can

favor either right- or left-handedness. In the case of

*Lymnaea peregra*, studies indicate that a dextral gene is

expressed during egg formation; i.e., before egg

fertilization, the gene produces a protein, found in the

cytoplasm of the egg, that controls the pattern of cell

division and thus handedness. In experiments, an

injection of cytoplasm from dextral eggs changes the

pattern of sinistral eggs, but an injection from sinistral

eggs does not influence dextral eggs. One explanation for

the differing effects is that all *Lymnaea peregra* eggs

begin left-handed but most switch to being right-handed.

Thus, the path to a solution to the puzzle of handedness in

all snails appears to be as twisted as the helix itself.

(472 words)

4. The second paragraph of the passage is primarily

concerned with offering possible reasons why

(A) it is unlikely that evolutionary mechanisms

could discriminate against sinistral snails

(B) sinistrality is relatively uncommon among snail

species

(C) dextral and sinistral populations of a snail

species tend to intermingle

(D) a theory based on a developmental mechanism

inadequately accounts for the predominance

of dextrality across snail species

(E) dextral snails breed more readily than sinistral

snails, even within predominantly sinistral

6. According to the passage, which of the following is

true of *Lymnaea peregra*?

(A) Handedness within the species was at one time

equally distributed between left and right.

(B) Under laboratory conditions, dextral eggs from

*Lymnaea peregra* can be artificially induced

to develop into sinistral snails.

(C) Broods of *Lymnaea peregra* are, without varia-

tion, exclusively sinistral or dextral.

(D) Handedness in *Lymnaea peregra* offspring is

determined by two parents together.

(E) fewer sinistral offspring in dextral broods than

dextral offspring in sinistral broods

populations

7. Which of the following accurately describes the

5. In describing the "evolutionary mechanism" (the first

sentence of the third paragraph), the author mentions

which of the following?

(A) The favorable conditions for nurturing new

offspring

(B) The variable environmental conditions that

affect survival of adult snails

(C) The availability of potential mates for breeding

(D) The structural identity of offspring to parents of

the same hand

(E) The frequency of unions between snails of

different species

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relationship between the evolutionary and

developmental theories discussed in the passage?

(A) Although the two theories reach the same

conclusion, each is based on different

assumptions.

(B) They present contradictory explanations of the

same phenomenon.

(C) The second theory accounts for certain

phenomena that the first cannot explain.

(D) The second theory demonstrates why the first is

valid only for very unusual, special cases.

(E) They are identical and interchangeable in that

the second theory merely restates the first in

less technical terms.

Martin Luther King's role in the movement protesting

the war in Vietnam appears to require little explanation,

since he was the foremost advocate of nonviolence of his

time. But King's stance on the Vietnam War cannot be

explained in terms of pacifism alone. After all, he was

something of a latecomer to the antiwar movement, even

though by 1965 he was convinced that the role of the

United States in the war was indefensible. Why then the

two years that passed before he translated his private

misgivings into public dissent? Perhaps he believed that

he could not criticize American foreign policy without

endangering the support for civil rights that he had won

8.Select the sentence in the passage in which the author

indicates a reason for the delay of King‘s public protest

against the war.

from the federal government.

(116 words)

162

An economist concluded that Kregg Company

deliberately discriminated against people with a

history of union affiliation in hiring workers for its

new plant. The economist's evidence is that, of the

1,500 people hired to work at the new plant, only 100

had ever belonged to a labor union, whereas in Kregg

Company's older plants, a much higher proportion of

workers have a history of union affiliation.

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9. Which of the following is an assumption on which

the economist's argument depends?

(A) None of the people with a history of union

affiliation who were hired to work at the new

plant were union organizers.

(B) Applicants for jobs at the new plant were not

asked by Kregg's recruiters whether they had

ever belonged to a labor union.

(C) In the plants of some of Kregg's competitors, the

workforce consists predominantly of union

members.

(D) The company believes that the cost of running

the new plant will be lower if labor unions are

not represented in the workforce.

(E) The pool of potential candidates for jobs at the

new plant included some people, in addition to

those Kregg hired, with a history of union

affiliation.

Quantum mechanics is a highly successful theory: it

supplies methods for accurately calculating the results of

diverse experiments, especially with minute particles. The

predictions of quantum mechanics, however, give only the

probability of an event, not a deterministic statement of

whether or not the event will occur. Because of this

probabilism, Einstein remained strongly dissatisfied with

the theory throughout his life, though he did not maintain

that quantum mechanics is wrong. Rather, he held that it is

incomplete: in quantum mechanics the motion of a particle

must be described in terms of probabilities, he argued, only

because some parameters that determine the motion have

not been specified. Einstein's ideas have been tested by

experiments performed since his death, and as most of

these experiments support traditional quantum mechanics,

Einstein's approach is almost certainly erroneous.

(134 words)

164

10. It can be inferred from the passage that the author's

conclusion that Einstein's approach is "erroneous"

might have to be modified because

(A) it is theoretically possible to generate plausible

theories with hidden parameters within them

(B) some experimental tests of Einstein's theory do

not disconfirm the hidden-parameter theory

of quantum mechanics

(C) it is possible for a theory to have hidden

parameters and yet be probabilistic

(D) traditional quantum mechanics has not yet been

used to analyze all of the phenomena to

which it could be applied

(E) there are too many possible hidden parameters

to develop meaningful tests of hidden-

parameter theories

***Exercise 29***

Analyzing the physics of dance can add fundamentally

to a dancer's skill. Although dancers seldom see themselves

totally in physical terms -- as body mass moving through

space under the influence of well-known forces and

obeying physical laws -- neither can they afford to ignore

the physics of movement. Some movements involving

primarily vertical or horizontal motions of the body as a

whole, in which rotations can be ignored, can be studied

using simple equations of linear motion in three dimensions.

However, rotational motions require more complex

approaches that involve analyses of the way the body's

mass is distributed, the axes of rotation involved in

different types of movement, and the sources of the forces

1.The primary purpose of the passage is to

(A) initiate a debate over two approaches to

analyzing a field of study

(B) describe how one field of knowledge can be

applied to another field

(C) point out the contradictions between two distinct

theories

(D) Define and elaborate on an accepted scientific

principle

(E) discuss the application of a new theory within

a new setting

**For the following question, consider each of the**

that produce the rotational movement.

(120 words)

165

**choices separately and select all that apply**

2.The author mentions all of the following as contributing

to an understanding of the physics of dance

A analyses of the way in which the body's mass

is distributed

B equations of linear motion in three dimensions

C analyses of the sources that produce rotational

motions

3. Hastings‘ contracture is a disorder of the connective

tissue in one or both hands, most commonly causing

loss of mobility. A survey of thousands of

medical-insurance claims found that over 30 percent

of people who had one hand operated on for Hastings'

contracture underwent surgery a second time for this

disorder within three years. Clearly, therefore, a

single surgical treatment of Hastings' contracture is

often ineffective at providing long-term correction of

the disorder.

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Which of the following, if true, most seriously weakens

the argument?

(A) The medical-insurance claims did not specie

whether the surgery was on the patient's right or

left hand.

(B) The surgical techniques used to treat Hastings'

contracture are identical to those used

successfully to treat certain work-related injuries

to the hand.

(C) A separate survey found that 90 percent of

patients operated on for Hastings' contracture

report increased hand mobility within one month

after the surgery.

(D) All of the patients in the survey were required by

their insurance companies to seek a second

opinion from a qualified surgeon before

undergoing the operation.

(E) Many people who have Hastings' contracture

choose to tolerate its effects rather than undergo

the risks of surgery.

The Fourteenth Amendment to the United States

Constitution, ratified in 1868, prohibits state governments

from denying citizens the "equal protection of the laws."

Although precisely what the framers of the amendment

meant by this equal protection clause remains unclear, all

interpreters agree that the framers' immediate objective was

to provide a constitutional warrant for the Civil Rights Act

of 1866, which guaranteed the citizenship of all persons

born in the United States and subject to United States

jurisdiction. This declaration, which was echoed in the text

of the Fourteenth Amendment, was designed primarily to

counter the Supreme Court's ruling in *Dred Scott v. Sandford*

that Black people in the United States could be denied

citizenship. The act was vetoed by President Andrew Johnson,

who argued that the Thirteenth Amendment, which abolished

slavery, did not provide Congress with the authority to extend

citizenship and equal protection to the freed slaves.

Although Congress promptly overrode Johnson's veto,

supporters of the act sought to ensure its constitutional

foundations with the passage of the Fourteenth Amendment.

(172 words)

167

4.The author implies that the Fourteenth Amendment

might not have been enacted if

(A) Congress' authority with regard to legislating

civil rights had not been challenged

(B) the framers had anticipated the Supreme Court's

ruling in Brown v. Board of Education

(C) the framers had believed that it would be used in

deciding cases of discrimination involving

non-racial groups

(D) most state governments had been willing to

protect citizens' civil rights

(E) its essential elements had not been implicit in the

Thirteenth Amendment

5.According to the passage, which of the following

most accurately indicates the sequence of the events

listed below ?

I. Civil Rights Act of 1866

II. *Dred Scott v. Sandford*

III. Fourteenth Amendment

IV. Veto by President Johnson

(A) I, II, III, IV

(B) I, IV, II, III

(C) I, IV, III, II

(D) II, I, IV, III

(E) III, II, I, IV

6. In the context in which it appears, "overrode" most

nearly means

A trampled

B extended

C annulled

D neutralized

E compromised

Many organisms are capable of altering their habitat

significantly, sometimes limiting their own growth. The

influence of the biological component of an ecosystem is

often greater in fresh waters that in marine or terrestrial

systems, because of the small size of many freshwater

bodies. Many of the important effects of organisms are

related to their physiology, especially growth and

respiration. By their growth many species can deplete

essential nutrients within the system, thus limiting their

own growth or that of other species. Lund has demonstrated

that in Lake Windermere the alga *Asterionella* is unable to

grow in conditions that it itself has created. Once a year, in

the spring, this plant starts to grow rapidly in the lake,

using up so much silica from the water that by late spring

there is no longer enough to maintain its own growth. The

population decreases dramatically as a result. (147 words)

168

7.It can be inferred from the passage that which of the

followings is true about *Asterionella* plants in Lake

Windermere?

(A) They are not present except in early spring.

(B) They contribute silica to the waters as they grow.

(C) They are food for other organisms.

(D) They form a silica-rich layer on the lake

bottom.

(E) Their growth peaks in the spring.

8. Select the sentence in the passage that indicates certain

causes of the alteration of organisms to their habitat.

Design courses should be an essential element in

engineering curricula. Because perceptive processes are not

assumed to entail "hard thinking," nonverbal thought is

sometimes seen as a primitive stage in the development of

cognitive processes and inferior to verbal or mathematical

thought. But it is paradoxical that when the staff of the

*Historic American Engineering Record* wished to have

drawings made of machines and isometric views of

industrial processes for its historical record of American

engineering, the only college students with the requisite

abilities were not engineering students, but rather students

attending architectural schools.

If courses in design, which in a strongly analytical

engineering curriculum provide the background required

for practical problem-solving, are not provided, we can

expect to encounter silly but costly errors occurring in

advanced engineering systems. For example, early models

of high-speed railroad cars loaded with sophisticated

controls were unable to operate in a snowstorm because a

9.The author calls the predicament faced by the

*Historic American Engineering Record* "para-

doxical" most probably because

(A) the publication needed drawings that its own

staff could not make

(B) architectural schools offered but did not require

engineering design courses for their students

(C) college students were qualified to make the

drawings while practicing engineers were not

(D) the drawings needed were so complicated that

even students in architectural schools had

difficulty making them.

(E) engineering students were not trained to make

the type of drawings needed to record the

development of their own discipline

10.The author uses the example of the early models of

high-speed railroad cars primarily to

(A) weaken the argument that modern engineering

fan sucked snow into the electrical system.

(157 words)

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systems have major defects because of an

absence of design courses in engineering

curricula

(B) support the thesis that the number of errors in

modern engineering systems is likely to

increase

(C) illustrate the idea that courses in design are the

most effective means for reducing the cost of

designing engineering systems

(D) support the contention that a lack of attention to

the nonscientific aspects of design results in

poor conceptualization by engineers

(E) weaken the proposition that mathematics is a

necessary part of the study of design

***Exercise 30***

Sex-defined protective laws have often been based on

stereotypical assumptions concerning women's needs and

abilities, and employers have frequently used them as legal

excuses for discriminating against women. After the Second

World War, for example, businesses and government sought

to persuade women to vacate jobs in factories, thus making

room in the labor force for returning veterans. The revival

or passage of state laws limiting the daily or weekly work

hours of women conveniently accomplished this. Employers

had only to declare that overtime hours were a necessary

condition of employment or promotion in their factory, and

women could be quite legally fired, refused jobs, or kept at

low wage levels, all in the name of "protecting" their health.

At the same time, even the most well- intentioned

lawmakers, courts, and employers have often been blind to

the real needs of women. The lawmakers and the courts

continue to permit employers to offer employee health

insurance plans that cover all known human medical

disabilities except those relating to pregnancy and childbirth.

(170 words)

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1. According to the author, which of the following

resulted from the passage or revival of state laws

limiting the work hours of women workers?

(A) Women workers were compelled to leave their jobs in

factories.

(B) Many employers had difficulty in providing jobs for

returning veterans.

(C) Many employers found it hard to attract women

workers.

(D) The health of most women factory workers improved.

(E) Employment practices that addressed the real needs of

women workers became common.

2. The author places the word "protecting" in quotation

marks most likely in order to suggest that

(A) she is quoting the actual wording of the laws in

question

(B) the protective nature of the laws in question

should not be overlooked

(C) protecting the health of workers is important to

those who support protective labor laws

(D) the laws in question were really used to the

detriment of women workers, despite being

overtly protective in intent

(E) the health of workers is not in need of protection,

even in jobs where many hours of overtime work

are required

3.A society can achieve a fair distribution of resources

only under conditions of economic growth. There can

be no economic growth unless the society guarantees

equality of economic opportunity to all of its citizens.

Equality of economic opportunity cannot be

guaranteed unless a society's government actively

works to bring it about.

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If the statements given are true, it can be properly

concluded from them that

(A) no government can achieve a fair distribution of

resources under conditions of economic growth

(B) all societies that guarantee equality of economic

opportunity to all of their members are societies

that distribute resources fairly

(C) a society can achieve a fair distribution of

resources only if its government actively works

to bring about equality of economic opportunity

(D) there can be no economic growth in a society

unless that society guarantees a fair distribution

of resources

(E) some societies that experience economic growth

fail to guarantee equality of opportunity to all of

their citizens

The sweep of narrative in A. N. Wilson's biography of C. S.

Lewis is impressive and there is much that is acute and well

argued. But much in this work is careless and unworthy of its

author. Wilson, a novelist and an accomplished biographer,

has failed to do what any writer on such a subject as Lewis

ought to do, namely work out a coherent view of how the

various literary works by the subject are to be described and

commented on. Decisions have to be made on what to look at

in detail and what to pass by with just a mention. Wilson has

not thought this problem out. For instance, *Till We Have*

*Faces*, Lewis' treatment of the Eros and Psyche story and one

of his best-executed and most moving works, is merely

mentioned by Wilson, though it illuminates Lewis' spiritual

development, whereas Lewis' minor work *Pilgrim's Regress* is

5.The author of the passage would be most likely to

agree with which of the following statements regarding

*Till We Have Faces*?

(A) It is an improvement over the Eros and Psyche

story on which it is based.

(B) It illustrated Lewis' attempt to involve his readers

emotionally in the story of Eros and Psyche.

(C) It was more highly regarded by Wilson than by

Lewis himself.

(D) It is one of the outstanding literary achievements

of Lewis' career.

(E) It is probably one of the most popular of Lewis'

works.

looked at in considerable detail.

(156 words)

6.Which of the following best describes the organization

of the passage?

**For the following question, consider each of the**

**choices separately and select all that apply**

4.The author of the passage implies that Wilson's

examination of *Pilgrim's Regress*

A was disproportionately long relative to the amount of

effort Lewis devoted to writing *Pilgrim's Regress*

B was more extensive than warranted because of the

relative unimportance of *Pilgrim's Regress*

C is not as coherent as his treatment of *Till We Have*

*Faces*

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(A) An evaluation is made, and aspects of the evaluation

are expanded on with supporting evidence.

(B) A theory is proposed, and supporting examples are

provided.

(C) A position is examined, analyzed, and rejected.

(D) A contradiction is described, then the points of

contention are evaluated and reconciled.

(E) Opposing views are presented and evaluated, then

modifications are advocated.

The two claws of the mature American lobster are

decidedly different from each other. The crusher claw is

short and stout; the cutter claw is long and slender. This

bilateral asymmetry begins to appear in the juvenile sixth

stage of development. One possible explanation is that

differential use of the claws determines their asymmetry;

the claw that is used more becomes the crusher.

To test this hypothesis, researchers raised lobsters in the

juvenile fourth and fifth stages of development in a

laboratory environment in which the lobsters could

manipulate oyster chips. Under these conditions, the

lobsters developed asymmetric claws, half with crusher

claws on the left, and half with crusher claws on the right.

In contrast, when juvenile lobsters were reared in a smooth

tank without the oyster chips, the majority developed two

cutter claws. This unusual configuration of symmetrical

cutter claws did not change when the lobsters were

subsequently placed in a manipulatable environment or

when they lost and regenerated one or both claws.

(165 words)

7.The passage is primarily concerned with

(A) drawing an analogy between asymmetry in

lobsters and handedness in humans

(B) developing a method for predicting whether

crusher claws in lobsters will appear on the

left or right side

(C) explaining differences between lobsters'

crusher claws and cutter claws

(D) discussing a possible explanation for the way

bilateral asymmetry is determined in lobsters

(E) summarizing the stages of development of the

lobster

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8.It can be inferred that of the two laboratory

environments mentioned in the passage, the one with

oyster chips was designed to

(A) prove that the presence of oyster chips was not

necessary for the development of a crusher

claw.

(B) prove that the relative length of time that the

lobsters were exposed to the oyster-chip

environment had little impact on the development

of a crusher claw

(C) eliminate the environment as a possible influence

in the development of a crusher claw

(D) control on which side the crusher claw develops

(E) simulate the conditions that lobsters encounter

in their natural environment

9.Which of the following conditions does the

passage suggest is a possible cause for the failure

of a lobster to develop a crusher claw?

(A) The loss of a claw during the third or earlier

stage of development

(B) The loss of a claw during the fourth or fifth

stage of development

(C) The loss of a claw during the sixth stage of

development

(D) Development in an environment devoid of material

that can be manipulated

(E) Development in an environment that changes

frequently throughout the stages of development

(A) the physicists, using a different method for

10. Which of the following, if true, most logically

completes the passage?

Every fusion reaction releases neutrinos. To test a

hypothesis about the frequency of fusion reactions in the

Sun, physicists calculated the number of neutrinos the

Sun would produce annually if the hypothesis were

correct. From this they estimated how many neutrinos

should pass through a particular location on Earth. The

fact that far fewer neutrinos were counted than were

predicted to pass through the location would seem to

prove that the hypothesis is wrong, except that------.

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estimating how many neutrinos should reach the

location, confirmed their original estimate

(B) there are several competing hypotheses about the

frequency of solar fusion reactions

(C) there is not enough energy in the Sun to destroy a

neutrino once it is released

(D) the method used to count neutrinos detects no

more than approximately ten percent of the

neutrinos that pass through

(E) neutrinos released in the fusion reactions of other

stars also reach the Earth

***Exercise 31***

1.

High Towers, a company that occupies several office

buildings, is considering installing new energy-

efficient lightbulbs in its buildings. The new bulbs

require less than half the electricity consumed by the

conventional bulbs currently used to produce the

same amount of light. The new bulbs also last

considerably longer. It follows that by replacing old

bulbs as they bum out with the new kind of bulb,

High Towers would significantly reduce its overall

lighting costs.

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Which of the following, if true, most strengthens the

argument given?

(A) If the new bulbs are widely adopted, as seems

likely, they will be produced in large enough

quantities to be offered at prices comparable to

those of conventional bulbs.

(B) The utility that supplies High Towers with

electricity offers discount rates to its largest

customers.

(C) High Towers has recently signed a contract to

occupy an additional small office building.

(D) High Towers has begun a campaign to encourage

its employees to turn off lights whenever they

leave a room.

(E) The company that manufactures the new bulbs

has been granted a patent on the innovative

technology used in the bulbs and thus has

exclusive rights to manufacture them.

The defoliation of millions of acres of trees by massive

infestations of gypsy moth caterpillars is a recurring

phenomenon in the northeastern United States. In studying

these outbreaks, scientists have discovered that affected

trees fight back by releasing toxic chemicals, mainly

phenols, into their foliage. These noxious substances limit

caterpillars' growth and reduce the number of eggs that

female moths lay. Phenols also make the eggs smaller,

which reduces the growth of the following year's

caterpillars. Because the number of eggs a female moth

produces is directly related to her size, and because her

size is determined entirely by her feeding success as a

caterpillar, the trees' defensive mechanism has an impact

on moth fecundity.

The gypsy moth is also subject to attack by the

nucleopolyhedrosis virus, or wilt disease, a particularly

important killer of the caterpillars in outbreak years.

Caterpillars contract wilt disease when they eat a leaf to

which the virus, encased in a protein globule, has become

attached. Once ingested by a caterpillar, the protein

globule dissolves, releasing thousands of viruses, or

virions, that after about two weeks multiply enough to fill

the entire body cavity. When the caterpillar dies, the

virions are released to the outside, encased in a new

protein globule synthesized from the caterpillar's tissues

and ready to be picked up by other caterpillars.

Knowing that phenols, including tannins, often act by

associating with and altering the activity of proteins,

researchers focused on the effects on caterpillars of

ingesting the virus and leaves together. They found that

on tannin-rich oak leaves, the virus is considerably less

effective at killing caterpillars than when it is on aspen

leaves, which are lower in phenols. In general, the more

concentrated the phenols in tree leaves, the less deadly the

virus. Thus, while highly concentrated phenols in tree

leaves reduce the caterpillar population by limiting the size

of caterpillars and, consequently, the size of the female's

egg cluster, these same chemicals also help caterpillars

survive by disabling the wilt virus. Forest stands of red

oaks, with their tannin-rich foliage, may even provide

caterpillars with safe havens from disease. In stands

dominated by trees such as aspen, however, incipient gypsy

moth outbreaks are quickly suppressed by viral epidemics.

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Further research has shown that caterpillars become

virtually immune to the wilt virus as the trees on which

they feed respond to increasing defoliation. The trees' own

defenses raise the threshold of caterpillar vulnerability to

the disease, allowing populations to grow denser without

becoming more susceptible to infection. For these reasons,

the benefits to the caterpillars of ingesting phenols appear

to outweigh the costs. Given the presence of the virus, the

trees' defensive tactic apparently has backfired.

(446 words)

2. It can be inferred from the passage that wilt disease

virions depend for their survival on

(A) protein synthesized from the tissues of a host

caterpillar

(B) aspen leaves with high concentrations of phenols

(C) tannin-rich oak leaves

(D) nutrients that they synthesize from gypsy moth

egg clusters

(E) a rising threshold of caterpillar vulnerability to

wilt disease

3.Which of the following best describes the function of

the third paragraph of the passage?

(A) It resolves a contradiction between the ideas

presented in the first and second paragraphs.

(B) It introduces research data to support the theory

outlined in the second paragraph.

(C) It draws a conclusion from conflicting evidence

presented in the first two paragraphs.

(D) It shows how phenomena described in the first

and second paragraphs act in combination.

(E) It elaborates on the thesis introduced in the first

paragraph after a digression in the second

paragraph.

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4. Select the sentence in the passage that the author uses

as a supporting idea to explicate how gypsy moth

caterpillars become immune to the wilt virus.

**For the following question, consider each of the**

**choices separately and select all that apply**

5.Which of the following statements about gypsy moth

caterpillars is supported by information presented in

the passage EXCEPT?

A Differing concentrations of phenols in leaves have

differing effects on the ability of the wilt virus to

kill gypsy moth caterpillars.

B Female gypsy moth caterpillars stop growing after

they ingest leaves containing phenols.

C The longer a gypsy moth population is exposed to

wilt disease, the greater the likelihood that the

gypsy moth caterpillars will become immune to

the virus.

Although a historical lack of access to formal Spanish-

language education initially limited the opportunities of

some Chicanos to hone their skills as writers of Spanish,

their bilingual culture clearly fostered an exuberant and

compelling oral tradition. It has thus generally been by way

of the emphasis on oral literary creativity that these

Chicano writers, whose English-language works are

sometimes uninspired, developed the powerful and

arresting language that characterized their Spanish-

language works. This Spanish-English difference is not

surprising. When writing in Spanish, these authors stayed

close to the spoken traditions of their communities. Works

in English, however, often required the elimination of

nuance or colloquialism, the adoption of a formal tone, and

the adjustment of themes or ideas to satisfy the different

6.According to the author, the Chicano oral experience

contributed directly to which of the following

characteristics in the work of some Chicano writers?

(A) A sensitivity to and adeptness in using the

spoken language

(B) A tendency to appear in national rather than

regional publications

(C) A style reflecting the influence of Spanish

language education

(D) A reliance on a rather formal style

(E) A capacity to appeal to a broad range of audiences

7. Which of the following best characterizes the function

of the indicated portion (the last two sentences) of the

passage ?

demands of national publications.

(127 words)

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(A) They expand on an advantage mentioned in the

first sentence of the passage.

(B) They outline the consequences of a limitation

discussed in the first sentence of the passage.

(C) They provide explicit examples drawn from

the oral and the written works mentioned in the

second sentence of the passage.

(D) They explain the causes of a phenomenon

mentioned in the third sentence of the passage.

(E) They limit the applicability of a generalization

made in the third sentence of the passage.

In medical tomography x-rays map the human body's

density variations (and hence internal organs); the

information from the x-rays, transmitted through the body

along many different paths, is recombined to form three-

dimensional images of the body's interior. It is primarily

this multiplicative increase in data obtained from the

multipath transmission of signals that accounts for

oceanographers' attraction to tomography.

Researchers reasoned that low-frequency sound waves,

because they are so well described mathematically and

because even small perturbations in emitted sound waves

can be detected, could be transmitted through the ocean

over many different paths and that the properties of the

ocean's interior could be deduced on the basis of how the

ocean altered the signals. Their initial trials were highly

successful, and ocean acoustic tomography was born.

(128 words)

179

8.Which of the following, if presented as the first

sentence of a succeeding paragraph, would most

logically continue the discussion presented in the

passage?

(A) Timekeeping in medical tomography must be

precise because the changes in travel time caused

by density fluctuations are slight.

(B) To understand how ocean acoustic tomography

works, it is necessary to know how sound

travels in the ocean.

(C) Ships are another possibility. but they would

need to stop every 50 kilometers to lower

measuring instruments.

(D) These variations amount to only about 2 to 3

percent of the average speed of sound in water,

which is about 1,500 meters per second.

(E) The device used in medical tomography emits a

specially coded signal, easily distinguishable

from background noise

Ironically, now that photography is securely

established as a fine art, many photographers find it

pretentious or irrelevant to label it as such. Serious

photographers variously claim to be finding, recording,

impartially observing, witnessing events, exploring

themselves—anything but making works of art. In the

nineteenth century, photography's association with the

real world placed it in an ambivalent relation to art; late in

the twentieth century, an ambivalent relation exists

because of the Modernist heritage in art. That important

photographers are no longer willing to debate whether

photography is or is not a fine art, except to proclaim that

their own work is not involved with art, shows the extent

to which they simply take for granted the concept of art

imposed by the triumph of Modernism: the better the art,

the more subversive it is of the traditional aims of art.

(142 words)

180

9.Which of the following adjectives best describes

―the concept of art imposed by the triumph of

Modernism‖ as the author represents it in the last sentence?

(A) Objective

(B) Mechanical

(C) Superficial

(D) Dramatic

(E) Paradoxical

10. In the context in which it appears, "ambivalent " most

nearly means

A subversive

B unambiguous

C equivocal

D disreputable

E contradictory

***Exercise 32***

The recent change to all-volunteer armed forces in the

United States will eventually produce a gradual increase in

the proportion of women in the armed forces and in the

variety of women‘s assignments, but probably not the

dramatic gains for women that might have been expected.

This is so even though the armed forces operate in an ethos

of institutional change oriented toward occupational

equality and under the federal sanction of equal pay for

equal work. The difficulty is that women are unlikely to be

trained for any direct combat operations; a significant

portion of the larger society remains uncomfortable as yet

with extending equality in this direction. Therefore, for

women in the military, the search for equality will still be

based on functional equivalence, not identity or even

**For the following question, consider each of the**

**choices separately and select all that apply**

1. The passage implies that which of the following is a

factor conducive to a more equitable representation

of women in the United States armed forces than

has existed in the past?

A The all-volunteer character of the present

armed forces

B The past service records of women who had

assignments functionally equivalent to men‘s

assignments

C Restrictive past policies governing the military

assignments open to women

similarity of task.

(132 words)

181

About a century ago, the Swedish physical scientist

Arrhenius proposed a law of classical chemistry that relates

chemical reaction rate to temperature. According to the

Arrhenius equation, chemical reaction are increasingly

unlikely to occur as temperatures approach absolute zero,

and at absolute zero (zero degrees Kelvin, or minus 273

degrees Celsius) reactions stop. However, recent

experimental evidence reveals that although the Arrhenius

equation is generally accurate in describing the kind of

chemical reaction that occurs at relatively high

temperatures, at temperatures closer to zero a quantum-

molecules, such as interstellar formaldehyde, in dark clouds

of interstellar dust. Afterward complex organic molecules

would be formed, slowly but surely, by means of tunneling.

After I offered my hypothesis, Hoyle and Wickramasinghe

argued that molecules of interstellar formaldehyde have

indeed evolved into stable polysaccharides such as

cellulose and starch. Their conclusions, although strongly

disputed, have generated excitement among investigators

such as myself who are proposing that the galactic clouds

are the places where the prebiological evolution of

compounds necessary to life occurred.

mechanical effect known as tunneling comes into play; this

effect accounts for chemical reactions that are forbidden by

the principles of classical chemistry. Specifically, entire

molecules can "tunnel" through the barriers of repulsive

forces from other molecules and chemically react even

though these molecules do not have sufficient energy,

according to classical chemistry, to overcome the repulsive

barrier.

The rate of any chemical reaction, regardless of the

temperature at which it takes place, usually depends on a

very important characteristic known as its activation energy.

Any molecule can be imagined to reside at the bottom of a

so-called potential well of energy. A chemical reaction

corresponds to the transition of a molecule from the bottom

of one potential well to the bottom of another. In classical

chemistry, such a transition can be accomplished only by

going over the potential barrier between the wells, the

height of which remains constant and is called the

activation energy of the reaction. In tunneling, the reacting

molecules tunnel from the bottom of one to the bottom of

another well without having to rise over the barrier between

the two wells. Recently researchers have developed the

concept of tunneling temperature: the temperature below

which tunneling transitions greatly outnumber Arrhenius

transitions, and classical mechanics gives way to its

quantum counterpart.

This tunneling phenomenon at very low temperatures

suggested my hypothesis about a cold prehistory of life: the

formation of rather complex organic molecules in the deep

cold of outer space, where temperatures usually reach only

a few degrees Kelvin. Cosmic rays (high-energy protons

and other particles) might trigger the synthesis of simple

182

2.According to the passage, classical chemical reactions and

tunneling reactions are alike in which of the following

ways?

(A) In both types of reactions, reacting molecules have to rise

over the barrier between the two wells.

(B) In both types of reactions, a transition is made from

the bottom of one potential well to the bottom of

another.

(C) In neither type of reaction does the height of the

barrier between the wells remain constant.

(D) In neither type of reaction does the rate of a chemical

reaction depend on its activation energy.

(E) In both types of reactions, reacting molecules are able

to go through the barrier between the two wells.

4.Which of the following best describes the hypothesis

of Hoyle and Wickramasinghe as it is presented in the

passage?

(A) Cosmic rays can directly synthesize complex

organic molecules.

(B) The galactic clouds are the places where prebio-

logical evolution of compounds necessary to life

occurred.

(C) Interstellar formaldehyde can be synthesized by

tunneling.

(D) Molecules of interstellar formaldehyde can evolve

into complex organic molecules.

(E) Complex organic molecules can be synthesized

from stable polysaccharides such as cellulose and

starch.

3.The author's hypothesis concerning the cold prehistory

of life would be most weakened if which of the following

were true?

(A)Cosmic rays are unlikely to trigger the formation of

simple molecules.

(B)Tunneling occurs only in a narrow band of

temperatures around zero degrees Kelvin.

(C)The synthesis of interstellar formaldehyde can be

activated by means other than cosmic rays.

(D)Simple molecules can be synthesized by means of

tunneling.

(E)Classical chemical reactions do not occur at

temperatures close to absolute zero.

183

5.Which of the following best describes the organization

of the first two paragraphs of the passage?

(A) The author cites a basic principle of classical

chemistry and then describes the research from

which that principle was developed.

(B) The author cites an apparent contradiction to

the principles of classical chemistry and then

explains the process of a chemical reaction to

show there is in fact no contradiction.

(C) the author describes the role of heat in chemical

reactions and then offers a detailed explanation

of its function.

(D) The author presents a law of classical chemistry in

order to introduce a kind of chemical reaction

that differs from it and then explains the essential

difference between the two.

(E) The author presents the fundamental rules of classical

chemistry in order to introduce an explanation of a

specific chemical reaction.

One explanation for the tendency of animals to be more

vigilant in smaller groups than in larger ones assumes that the

vigilant behavior—looking up, for example—is aimed at

predators. If individuals on the edge of a group are more vigilant

because they are at greater risk of being captured, then

individuals on average would have to be more vigilant in

smaller groups, because the animals on the periphery of a group

form a greater proportion of the whole group as the size of the

group diminishes.

However, a different explanation is necessary in cases where

the vigilant behavior is not directed at predators. J. Krebs has

discovered that great blue herons look up more often when in

smaller flocks than when in larger ones, solely as a consequence

of poor feeding conditions. Krebs hypothesizes that the herons

in smaller flocks are watching for herons that they might follow

to better feeding pools, which usually attract larger numbers of

6. It can be inferred from the passage that in species in

which vigilant behavior is directed at predators, the

tendency of the animals to be more vigilant in

smaller groups than in larger ones would most likely

be minimized if which of the following were true?

(A) The vigilance of animals on the periphery of a group

always exceeded that of animals located in its interior,

even when predators were not in the area.

(B) The risk of capture for individuals in a group was the

same, whether they were located in the interior of the

group or on its periphery.

(C) Animals on the periphery of a group tended to be less

capable of defending themselves from attack by predators

than animals located in the interior of the group.

(D) Animals on the periphery of a group tended to bear

marks that were more distinctive to predators than

the birds.

(162 words)

184

animals located in the interior of the group.

(E) Animals on the periphery of a group tended to have

shorter life spans than animals located in the interior of the

group.

**For the following question, consider each of the**

**choices separately and select all that apply**

7.The passage provides information in support of

which of the following assertions EXCEPT?

A Similar behavior in different species of animals

does not necessarily serve the same purpose.

B Vigilant behavior aimed at predators is seldom

more beneficial to groups of animals than to

individual animals.

C The avoidance of predators is more important to

an animal's survival than is the quest for food.

8. The painter Peter Brandon never dated his works, and

their chronology is only now beginning to take shape

in the critical literature. A recent dating of a Brandon

self-portrait to 1930 is surely wrong. Brandon was 63

years old in 1930, yet the painting shows a young,

dark-haired man-obviously Brandon, but clearly not a

man of 63.

185

Which of the following, if justifiably assumed, allows

the conclusion to be properly drawn?

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

that he painted when he was significantly younger

than 63.

(B) In refraining from dating his works, Brandon

intended to steer critical discussion of them away

from considerations of chronology.

(C) Until recently, there was very little critical

literature on the works of Brandon.

(D) Brandon at age 63 would not have portrayed

himself in a painting as he had looked when he

was a young man.

(E) Brandon painted several self-portraits that showed

him as a man past the age of 60.

This is not to deny that the Black gospel music of the

early twentieth century differed in important ways from the

slave spirituals. Whereas spirituals were created and

disseminated in folk fashion , gospel music was composed,

published, copyrighted, and sold by professionals.

Nevertheless, improvisation remained central to gospel music.

One has only to listen to the recorded repertoire of gospel

songs to realize that Black gospel singers rarely sang a song

precisely the same way twice and never according to its exact

musical notation. They performed what jazz musicians call

"head arrangements" proceeding from their own feelings and

from the way "the spirit" moved them at the time. This

improvisatory element was reflected in the manner in which

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

(A) counter an assertion about the role of improvi-

sation in music created by Black people

(B) compare early gospel music with gospel music

written later in the twentieth century

(C) make a distinction between gospel music and

slave spirituals

(D) introduce a discussion about the dissemination of

slave spirituals

(E) describe a similarity between gospel music and

slave spirituals

10.Of the following sentences, which is most likely to

gospel music was published.

(122 words)

186

have immediately preceded the passage?

(A) Few composers of gospel music drew on traditions

such as the spiritual in creating their songs.

(B) Spirituals and Black gospel music were derived

from the same musical tradition.

(C) The creation and singing of spirituals, practiced by

Black Americans before the Civil War, continued

after the war.

(D) Spirituals and gospel music can be clearly

distinguished from one another.

(E) Improvisation was one of the primary characteristics

of the gospel music created by Black musicians.

***Exercise 33***

Writing of the Iroquois nation, Smith has argued that

through the chiefs' council, tribal chiefs traditionally

maintained complete control over the political affairs of

both the Iroquois tribal league and the individual tribes

belonging to the league, whereas the sole jurisdiction over

religious affairs resided with the shamans. He contended

that this division was maintained until the late nineteenth

century. However, Smith fails to recognize that this division

of power between the tribal chiefs and shamans was not

actually rooted in Iroquois tradition; rather, it resulted from

the Iroquois' resettlement on reservations early in the

nineteenth century. Prior to resettlement, the chiefs' council

controlled only the broad policy of the tribal league;

individual tribes had institutions― most important, the

longhouse― to govern their own affairs. In the longhouse,

the tribe's chief influenced both political and religious

affairs.

(137 words)

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1. It can be inferred that the author of the passage

regards Smith's argument as

(A) provocative and potentially useful, but flawed

by poor organization

(B) eloquently presented, but needlessly inflammatory

(C) accurate in some of its particulars, but inaccurate

with regard to an important point.

(D) historically sound, but overly detailed and

redundant

(E) persuasive in its time, but now largely outdated

2. The author of the passage implies that which of the

following occurred after the Iroquois were resettled

on reservations early in the nineteenth century?

(A) Chiefs became more involved in their tribes'

religious affairs.

(B) The authority of the chiefs' council over the

affairs of individual tribes increased.

(C) The political influence of the Iroquois shamans

was diminished.

(D) individual tribes coalesced into the Iroquois

tribal league.

(E) The longhouse because a political rather than a

religious institution.

Over the years, biologists have suggested two main

pathways by which sexual selection may have shaped the

evolution of male birdsong. In the first, male competition

and intrasexual selection produce relatively short, simple

songs used mainly in territorial behavior. In the second,

female choice and intersexual selection produce longer,

more complicated songs used mainly in mate attraction;

like such visual ornamentation as the peacock's tail,

elaborate vocal characteristics increase the male's chances

of being chosen as a mate, and he thus enjoys more

reproductive success than his less ostentatious rivals. The

two pathways are not mutually exclusive, and we can

expect to find examples that reflect their interaction.

Teasing them apart has been an important challenge to

evolutionary biologists.

Early research confirmed the role of intrasexual

territory, also failed to correlate with song complexity.

The confirmation researchers had been seeking was

finally achieved in studies involving two varieties of

warblers. Unlike the song sparrow, which repeats one of its

several song types in bouts before switching to another, the

warbler continuously composes much longer and more

variable songs without repetition. For the first time,

researchers found a significant correlation between

repertoire size and early mating, and they discovered

further that repertoire size had a more significant effect

than any other measure of male quality on the number of

young produced. The evidence suggests that warblers use

their extremely elaborate songs primarily to attract females,

clearly confirming the effect of intersexual selection on the

evolution of birdsong.

(462 words)

selection. In a variety of experiments in the field, males

responded aggressively to recorded songs by exhibiting

territorial behavior near the speakers. The breakthrough for

research into intersexual selection came in the development

of a new technique for investigating female response in the

laboratory. When female cowbirds raised in isolation in

soundproof chambers were exposed to recordings of male

song, they responded by exhibiting mating behavior. By

quantifying the responses, researchers were able to

determine what particular features of the song were most

important. In further experiments on song sparrows,

researchers found that when exposed to a single song type

repeated several times or to a repertoire of different song

types, females responded more to the latter. The beauty of

the experimental design is that it effectively rules out

confounding variables; acoustic isolation assures that the

female can respond only to the song structure itself.

If intersexual selection operates as theorized, males

with more complicated songs should not only attract

females more readily but should also enjoy greater

reproductive success. At first, however, researchers doing

fieldwork with song sparrows found no correlation between

larger repertoires and early mating, which has been shown

to be one indicator of reproductive success; further,

common measures of male quality used to predict

reproductive success, such as weight, size, age, and

188

3. The passage is primarily concerned with

(A) showing that intrasexual selection has a greater

effect on birdsong than does intersexual selection

(B) contrasting the role of song complexity in several

species of birds

(C) describing research confirming the suspected

relationship between intersexual selection and the

complexity of birdsong

(D) demonstrating the superiority of laboratory work

over field studies in evolutionary biology

(E) illustrating the effectiveness of a particular

approach to experimental design in evolutionary

biology

4.The author mentions the peacock's tail in the first

paragraph most probably in order to

(A) cite an exception to the theory of the relationship

between intrasexual selection and male competition

(B) illustrate the importance of both of the pathways

that shaped the evolution of birdsong

(C) draw a distinction between competing theories of

intersexual selection

(D) give an example of a feature that may have evolved

through intersexual selection by female choice

(E) refute a commonly held assumption about the role

of song in mate attraction

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5. The passage indicates that researchers raised female

cowbirds in acoustic isolation in order to

(A) eliminate confounding variables

(B) approximate field conditions

(C) measure reproductive success

(D) quantify repertoire complexity

(E) prevent early mating

6. According to the passage, the song sparrow is unlike

the warbler in that the song sparrow

(A) uses songs mainly in territorial behavior

(B) continuously composes long and complex songs

(C) has a much larger song repertoire

(D) repeats one song type before switching to another

(E) responds aggressively to recorded songs

Which of the following, if true, most seriously challenges

7.Mayor: Four years ago when we reorganized the city

police department in order to save money, critics

claimed that the reorganization would make the police

less responsive to citizens and would thus lead to more

crime. The police have compiled theft statistics from

the years following the reorganization that show that

the critics were wrong. There was an overall decrease

in reports of thefts of all kinds, including small thefts.

190

the mayor's argument?

(A) When city police are perceived as unresponsive,

victims of theft are less likely to report thefts to

the police.

(B) The mayor's critics generally agree that police

statistics concerning crime reports provide the

most reliable available data on crime rates.

(C) In other cities where police departments have been

similarly reorganized, the numbers of reported

thefts have generally risen following

reorganization.

(D) The mayor's reorganization of the police

department failed to save as much money as it was

intended to save.

(E) During the four years immediately preceding the

reorganization, reports of all types of theft had

been rising steadily in comparison to reports of

other crimes.

The term "remote sensing" refers to the techniques of

measurement and interpretation of phenomena from a

distance. Prior to the mid-1960's the interpretation of film

images was the primary means for remote sensing of the

Earth's geologic features. With the development of the

optomechanical scanner, scientists began to construct digital

multispectral images using data beyond the sensitivity range of

visible light photography. These images are constructed by

mechanically aligning pictorial representations of such

phenomena as the reflection of light waves outside the visible

spectrum, the refraction of radio waves, and the daily changes

in temperature in areas on the Earth's surface. The advantage

of digital over photographic imaging is evident: the resulting

numerical data are precisely known, and digital data are not

subject to the vagaries of difficult-to- control chemical

processing.

191

8. Select the sentence in the passage that implies a major

disadvantage of photographic imaging in geologic

mapping.

For many years, Benjamin Quarles' seminal account of

the participation of African Americans in the American

Revolution has remained the standard work in the field.

According to Quarles, the outcome of this conflict was mixed

for African American slaves who enlisted in Britain's fight

against its rebellious American colonies in return for the

promise of freedom: the British treacherously resold many

into slavery in the West Indies, while others obtained

freedom in Canada and Africa. Building on Quarles' analysis

of the latter group, Sylvia Frey studied the former slaves who

emigrated to British colonies in Canada. According to Frey,

these refugees -- the most successful of the African American

Revolutionary War participants -- viewed themselves as the

ideological heirs of the American Revolution. Frey sees this

inheritances reflected in their demands for the same rights

that the American revolutionaries had demanded from the

British: land ownership, limits to arbitrary authority and

burdensome taxes, and freedom of religion. (157 words)

9.Which of the following can be inferred from the

passage concerning Britain's rule in its Canadian

colonies after the American Revolution?

(A) Humiliated by their defeat by the Americans, the British

sharply curtailed civil rights in their Canadian colonies.

(B) The British largely ignored their Canadian colonies.

(C) The British encouraged the colonization of Canada by

those African Americans who had served on the

American side as well as by those who had served on

the British side.

(D) Some of Britain's policies in its Canadian colonies

were similar to its policies in its American colonies

before the American Revolution.

(E) To reduce the debt incurred during the war, the British

imposed even higher taxes on the Canadian colonists

than they had on the American colonists.

192

10.Which of the following is most analogous to the

relationship between the African American

Revolutionary War participants who settled in Canada

after the American Revolution and the American

revolutionaries, as that relationship is described in the

passage?

(A) A brilliant pupil of a great musician rebels

against the teacher, but adopts the teacher's

musical style after the teacher's unexpected death.

(B) Two warring rulers finally make peace after a

lifetime of strife when they realize that they

have been duped by a common enemy.

(C) A child who has sided with a domineering

parent against a defiant sibling later makes

demands of the parent similar to those once

made by the sibling.

(D) A writer spends much of her life popularizing

the work of her mentor, only to discover late in

life that much of the older writer's work is

plagiarized from the writings of a foreign

contemporary.

(E) Two research scientists spend much of their

careers working together toward a common

goal, but later quarrel over which of them should

receive credit for the training of a promising

student.

***Exercise 34***

Only an effective collaboration between filmmakers and

art historians can create films that will enhance viewers'

perceptions of art. Filmmakers need to resist the impulse to

move the camera quickly from detail to detail for fear of

boring the viewer, to frame the image for the sake of drama

alone, to add music for fear of silence. Filmmakers are

aware that an art object demands concentration and, at the

same time, are concerned that it may not be compelling

enough―and so they hope to provide relief by interposing

"real" scenes that bear only a tangential relationship to the

subject. But a work of art needs to be explored on its own

terms. On the other hand, art historians need to trust that

one can indicate and analyze, not solely with words, but also

by directing the viewer's gaze. The specialized written

language of art history needs to be relinquished or at least

1.The passage suggests that a filmmaker desiring to

enhance viewers‘ perceptions of art should do which of

the following?

(A) Rely on the precise language of art history when

developing scripts for films on art.

(B) Rely on dramatic narrative and music to set a

film's tone and style.

(C) Recognize that a work of art by itself can be

compelling enough to hold a viewer's attention

(D) Depend more strongly on narration instead of

camera movements to guide the viewer's gaze.

(E) Emphasize the social and the historical contexts

within which works of art have been created.

2.According to the passage, art historians desiring to

tempered for the screen.

(158 words)

193

work with filmmakers to enhance the public's

appreciation of art need to acknowledge which of the

following?

(A) The art historian's role in the creation of a film on

art is likely to be a relatively minor one.

(B) Film provides an ideal opportunity to acquaint

viewers with a wide range of issues that relate

incidentally to a work of art.

(C) An in-depth analysis of a work of art is not an

appropriate topic for a film on art.

(D) Although silence may be an appropriate back-

ground when viewing a work of art in a

museum, it is inappropriate in a film.

(E) Film can use nonverbal means to achieve some of

the same results that a spoken or written discourse

can achieve.

As people age, their cells become less efficient and less able

to replace damaged components. At the same time their tissues

stiffen. For example, the lungs and the heart muscle expand less

successfully, the blood vessels become increasingly rigid, and

the ligaments and tendons tighten.

Few investigators would attribute such diverse effects to a

single cause. Nevertheless, researchers have discovered that a

process long known to discolor and toughen foods may also

contribute to age- related impairment of both cells and tissues.

That process is nonenzymatic glycosylation, whereby glucose

people age), researchers studied the effect of glucose on

solutions of purified crystallin, the major protein in the lens of

the eye. Glucose-free solutions remained clear, but solutions

with glucose caused the proteins to form clusters, suggesting

that the molecules had become cross-linked. The clusters

diffracted light, making the solution opaque. The researchers

also discovered that the pigmented cross-links in human

cataracts have the brownish color and fluorescence

characteristic of AGE's. These data suggest that

nonenzymatic glycosylation of lens crystallins may

becomes attached to proteins without the aid of enzymes. When

contribute to cataract formation.

(454 words)

enzymes attach glucose to proteins (enzymatic glycosylation),

they do so at a specific site on a specific protein molecule for a

specific purpose. In contrast, the nonenzymatic process adds

glucose haphazardly to any of several sites along any available

peptide chain within a protein molecule.

This nonenzymatic glycosylation of certain proteins has

been understood by food chemists for decades, although few

biologists recognized until recently that the same steps could

take place in the body. Nonenzymatic glycosylation begins

when an aldehyde group (CHO) of glucose and an amino group

(NH2) of a protein are attracted to each other. The molecules

combine, forming what is called a Schiff base within the protein.

This combination is unstable and quickly rearranges itself into a

stabler, but still reversible, substance known as an Amadori

product.

If a given protein persists in the body for months or years,

some of its Amadori products slowly dehydrate and rearrange

themselves yet again, into new glucose-derived structures.

These can combine with various kinds of molecules to form

irreversible structures named advanced glycosylation end

products (AGE's). Most AGE's are yellowish brown and

fluorescent and have specific spectrographic properties. More

important for the body, many are also able to cross-link adjacent

proteins, particularly ones that give structure to tissues and

organs. Although no one has yet satisfactorily described the

origin of all such bridges between proteins, many investigators

agree that extensive cross-linking of proteins probably

contributes to the stiffening and loss of elasticity characteristic

of aging tissues.

In an attempt to link this process with the development of

cataracts (the browning and clouding of the lens of the eye as

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**For the following question, consider each of the**

**choices separately and select all that apply**

3. According to the passage, which of the following

is NOT characteristic of enzymatic glycosylation of

proteins?

A Proteins affected by the process are made unstable.

B Glucose attachment impairs and stiffens tissues.

C Glucose is attached to proteins for specific purposes.

4. According to the passage, which of the following

statements is true of Amadori products in proteins?

(A) They are more plentiful in a dehydrated

environment.

(B) They are created through enzymatic glycosylation.

(C) They are composed entirely of glucose molecules.

(D) They are derived from Schiff bases.

(E) They are derived from AGE's

195

5. Which of the following best describes the function

of the third paragraph of the passage?

(A) It offers evidence that contradicts the findings

described in the first two paragraphs.

(B) It presents a specific example of the process

discussed in the first two paragraphs.

(C) It explains a problem that the researchers

mentioned in the second paragraph have yet to solve.

(D) It evaluates the research discoveries described

in the previous paragraph.

(E) It begins a detailed description of the process

introduced in the previous two paragraphs.

6. The passage suggests that which of the following

would be LEAST important in determining

whether nonenzymatic glycosylation is likely to

have taken place in the proteins of a particular

tissue?

(A) The likelihood that the tissue has been

exposed to free glucose

(B) The color and spectrographic properties of

structures within the tissue.

(C) The amount of time that the proteins in the

tissue have persisted in the body

(D) The number of amino groups within the

proteins in the tissue

(E) The degree of elasticity that the tissue exhibits

7. It takes a particular talent to be a successful business

manager. Business courses can help people to solve

management problems, but such courses can do so

only for those people with managerial talent. Such

people should take business courses to acquire ideas

that they can subsequently use to good advantage if

management problems happen to arise.

196

If the statements above are true, which of the following

must also be true on the basis of them?

(A) People who are helped by business courses in

solving management problems also have

managerial talent.

(B) People who are already skilled at solving

management problems are unlikely to benefit

from business courses.

(C) Most ideas that are used successfully in solving

management problems are those acquired in

business courses.

(D) People who lack managerial talent are more

likely to take business courses than are people

who have managerial talent.

(E) Those people who have never taken business

courses are unable to solve management

problems when such problems arise.

The age at which young children begin to make moral

discriminations about harmful actions committed against

themselves or others has been the focus of recent research into

the moral development of children. Until recently, child

psychologists supported pioneer developmentalist Jean Piaget in

his hypothesis that because of their immaturity, children under

age seven do not take into account the intentions of a person

committing accidental or deliberate harm, but rather simply

assign punishment for transgressions on the basis of the

magnitude of the negative consequences caused.

However, in recent research, Keasey found that six- year-old

children not only distinguish between accidental and intentional

harm, but also judge intentional harm as naughtier, regardless of

the amount of damage produced. Both of these findings seem to

indicate that children, at an earlier age than Piaget claimed,

advance into the second stage of moral development, moral

autonomy, in which they accept social rules but view them as

more arbitrary than do children in the first stage. (163 words)

197

8.According to the passage, Piaget and Keasey would not

have agreed on which of the following points?

(A) The kinds of excuses children give for harmful

acts they commit

(B) The age at which children begin to discriminate

between intentional and unintentional harm

(C) The intentions children have in perpetrating harm

(D) The circumstances under which children punish

harmful acts

(E) The justifications children recognize for mitigating

punishment for harmful acts

9.According to the passage, Keasey's findings support

which of the following conclusions about six-year-old

children?

(A)They have the ability to make autonomous moral

judgments.

(B)They regard moral absolutism as a threat to their

moral autonomy.

(C)They do not understand the concept of public duty.

(D)They accept moral judgment made by their peers

more easily than do older children.

(E)They make arbitrary moral judgments.

As of the late 1980's. neither theorists nor large-scale

computer climate models could accurately predict

whether cloud systems would help or hurt a warming

globe. Some studies suggested that a four percent increase

in stratocumulus clouds over the ocean could compensate

for a doubling in atmospheric carbon dioxide, preventing

a potentially disastrous planetwide temperature increase.

On the other hand, an increase in cirrus clouds could

increase global warming.

That clouds represented the weakest element in climate

models was illustrated by a study of fourteen such models.

Comparing climate forecasts for a world with double the

current amount of carbon dioxide, researchers found that

the models agreed quite well if clouds were not included.

But when clouds were incorporated, a wide range of

forecasts was produced.

(125 words)

198

10. Select the sentence that indicates one reason the

fourteen models described in the passage failed to

agree.

***Exercise 35***

It is their sensitive response to human circumstance that

accounts for the persistence of certain universal ideas. Rabbi

Meir, a second-century scholar, admonished his disciples to

look not at the pitcher but at its contents because, he stated,

"Many a new pitcher has been found to be full of old wine."

Creative ideas not only produce their own instruments of

survival as time and circumstances demand, but permit the

substitution of new forms for old under the pressure of

changed circumstances. For example democracy, as an idea,

originated in ancient Greece and was carried from there to

Western Europe and the Americas. But it did not retain the

ancient Greek form: it passed through several reforming

processes and exists today in many countries. Democratic

governments differ in form because democracy is in principle

dynamic and has therefore responded to local needs.

(141 words)

199

1. Select the sentence that contains the idea the example

of democracy is intended to illustrate

2.The "new pitcher" mentioned in the passage is the

equivalent of which of the following elements in the

author's discussion of democracy?

(A) Ancient Greece

(B) The idea of democracy

(C) A modern democratic government

(D) A dynamic principle

(E) The Greek form of democracy

Aided by the recent ability to analyze samples of air

trapped in glaciers, scientists now have a clearer idea of

the relationship between atmospheric composition and

global temperature change over the past 160,000 years.

In particular, determination of atmospheric composition

during periods of glacial expansion and retreat (cooling

and warming) is possible using data from the 2,000-meter

Vostok ice core drilled in Antarctica. The technique

involved is similar to that used in analyzing cores of

marine sediments, where the ratio of the two common

18 16

temperature changes. Isotopic analysis of oxygen in the

Vostok core suggests mean global temperature

fluctuations of up to 10 degrees centigrade over the past

160,000 years.

Data from the Vostok core also indicate that the

amount of carbon dioxide has fluctuated with temperature

over the same period: the higher the temperature, the

higher the concentration of carbon dioxide and the lower

the temperature, the lower the concentration. Although

change in carbon dioxide content closely follows change

in temperature during periods of deglaciation, it

apparently lags behind temperature during periods of

cooling. The correlation of carbon dioxide with

temperature, of course, does not establish whether

changes in atmospheric composition caused the warming

and cooling trends or were caused by them.

The correlation between carbon dioxide and

temperature throughout the Vostok record is consistent

and predictable. The absolute temperature changes,

however, are from 5 to 14 times greater than would be

expected on the basis of carbon dioxide‘s own ability to

absorb infrared radiation, or radiant heat. This reaction

suggests that, quite aside from changes in heat-trapping

gases, commonly known as greenhouse gases, certain

positive feedbacks are also amplifying the temperature

change. Such feedbacks might involve ice on land and sea,

clouds, or water vapor, which also absorb radiant heat.

Other data from the Vostok core show that methane

gas also correlates closely with temperature and carbon

dioxide. The methane concentration nearly doubled, for

example, between the peak of the penultimate glacial

period and the following interglacial period. Within the

200

present interglacial period it has more than doubled in just

the past 300 years and is rising rapidly. Although the

concentration of atmospheric methane is more than two

orders of magnitude lower than that of carbon dioxide, it

cannot be ignored: the radiative properties of methane

make it 20 times more effective, molecule for molecule,

than carbon dioxide in absorbing radiant heat. On the

basis of a simulation model that climatological

researchers have developed, methane appears to have

been about 25 percent as important as carbon dioxide in

the warming that took place during the most recent glacial

retreat 8,000 to 10,000 years ago.

(445 words)

isotopes of oxygen, O and O, accurately reflects past

**For the following question, consider each of the**

**choices separately and select all that apply**

3. The passage provides information to support which

of the following statements about methane EXCEPT?

A Methane is more effective than carbon dioxide

in absorbing radiant heat.

B The higher the concentration of carbon dioxide

in the Earth‘s atmosphere; the lower the

concentration of methane.

C Most of the global warming that has occurred

during the past 10 years has been associated with

5. It can be inferred from the passage that a long-term

decrease in the concentration of carbon dioxide in

the Earth‘s atmosphere would

(A) increase methane concentration in the

Earth‘s atmosphere

(B) accompany a period of glaciation

(C) encourage the formation of more oxygen

isotopes in the Earth‘s atmosphere

(D) promote the formation of more water in the

Earth‘s global environment

(E) increase the amount of infrared radiation

absorbed by the Earth‘s atmosphere

increased methane concentration.

6. The passage suggests that when the methane

4. According to the passage, which of the following

statements best describes the relationship between

carbon dioxide and global temperature?

(A) Carbon dioxide levels change immediately

in response to changes in temperature.

(B) Carbon dioxide levels correlate with global

temperature during cooling periods only.

(C) Once carbon dioxide levels increase, they

remain high regardless of changes in global

temperature.

(D)Carbon dioxide levels increase more quickly

than global temperature does.

(E) During cooling periods, carbon dioxide levels

initially remain high and then decline.

201

concentration in the Earth‘s atmosphere

decreases, which of the following also

happens?

(A) Glaciers melt faster.

(B) The concentration of carbon dioxide increases.

(C) The mean global temperature decreases.

(D) Carbon dioxide absorbs more radiant beat

(E) More clouds form in the Earth‘s atmosphere

The essential condition for the decay of the vacuum is

the presence of an intense electric field. As a result of the

decay of the vacuum, the space permeated by such a field

can be said to acquire an electric charge, and it can be

called a charged vacuum. The particles that materialize in

the space make the charge manifest. An electric field of

sufficient intensity to create a charged vacuum is likely to

be found in only one place: in the immediate vicinity of a

superheavy atomic nucleus, one with about twice as many

protons as the heaviest natural nuclei known. A nucleus

that large cannot be stable, but it might be possible to

assemble one next to a vacuum for long enough to

observe the decay of the vacuum.

(131 words)

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7. The author‘s assertions concerning the conditions

that lead to the decay of the vacuum would be

most weakened if which of the following occurred?

(A) Scientists created an electric field next to a

vacuum, but found that the electric field was

not intense enough to create a charged

vacuum.

(B) Scientists assembled a superheavy atomic

nucleus next to a vacuum, but found that no

virtual particles were created in the vacuum‘s

region of space.

(C) Scientists assembled a superheavy atomic

nucleus next to a vacuum, but found that

they could not then detect any real particles

in the vacuum‘s region of space.

(D)Scientists introduced a virtual electron and a

virtual positron into a vacuum‘s region of

space, but found that the vacuum did not

then fluctuate.

(E) Scientists introduced a real electron and a real

positron into a vacuum‘s region of space, but

found that the total energy of the space

increased by the energy equivalent of the

mass of the particles.

Historians have only recently begun to note the

increase in demand for luxury goods and services that

took place in eighteenth-century England. To answer the

question of why consumers became so eager to buy, some

historians have pointed to the ability of manufacturers to

advertise in a relatively uncensored press. This, however,

hardly seems a sufficient answer. McKendrick favors a

Veblen model of conspicuous consumption stimulated by

competition for status. The "middling sort" bought goods

and services because they wanted to follow fashions set

by the rich. Again, we may wonder whether this

explanation is sufficient. Do not people enjoy buying

things as a form of self-gratification? If so, consumerism

could be seen as a product of the rise of new concepts of

individualism and materialism, but not necessarily of the

8.In the paragraph, the author is primarily concerned with

(A) contrasting two theses and offering a compromise

(B) questioning two explanations and proposing a

possible alternative to them.

(C) paraphrasing the work of two historians and

questioning their assumptions

(D) examining two theories and endorsing one over

the other

(E) raising several questions but implying that they

cannot be answered.

9.According to the passage, a Veblen model of

conspicuous consumption has been used to

(A) investigate the extent of the demand for luxury

goods among social classes in eighteenth-

frenzy for conspicuous competition.

(135 words)

203

century England

(B) classify the kinds of luxury goods desired by

eighteenth-century consumers

(C) explain the motivation of eighteenth-century

consumers to buy luxury goods

(D) establish the extent to which the tastes of rich

consumers were shaped by the middle classes

in eighteenth-century England

(E)compare luxury consumerism in eighteenth-

century England with such consumerism in

the twentieth century

How can the hormone adrenaline that does not act directly

on the brain have a regulatory effect on brain function?

Recently, we tested the possibility that one of the hormone's

actions outside the brain might be responsible. Since one

consequence of adrenaline release in an animal is an increase

in blood glucose levels, we examined the effects of glucose on

memory in rats. We found that glucose injected immediately

after training enhances memory tested the next day. Additional

evidence was provided by negative findings : drugs called

adrenergic antagonists, which block peripheral adrenaline

receptors, disrupted adrenaline's ability to regulate memory

but did not affect memory enhancements produced by glucose

that was not stimulated by adrenaline. These results are as they

should be if adrenaline affects memory modulation by

10.The author refers to the results of the experiment using

adrenergic antagonists as "negative findings"

most likely because the adrenergic antagonists

(A) failed to disrupt adrenaline's effect on memory

(B) did not affect glucose's ability to enhance memory.

(C) did not block adrenaline's ability to increase blood

glucose levels

(D) only partially affected adrenaline's ability to

enhance memory

(E) disrupted both adrenaline's and glucose's effect

on memory

increasing blood glucose levels.

(131 words)

204

***Exercise 36***

An experiment conducted aboard Space Lab in 1983 was the

first attempt to grow protein crystals in the low-gravity

environment of space. That experiment is still cited as

evidence that growing crystals in microgravity can increase

crystal size: the authors reported that they grew lysozyme

protein crystals 1,000 times larger than crystals grown in the

same device on Earth. Unfortunately, the authors did not

point out that their crystals were no larger than the average

crystal grown using other, more standard techniques in an

Earth laboratory. No research has yet produced results that

could justify the enormous costs of producing crystals on a

large scale in space. To get an unbiased view of the

usefulness of microgravity crystal growth, crystals grown in

space must be compared with the best crystals that have been

grown with standard techniques on Earth.

(139 words)

205

1.It can be inferred from the passage that the author

would find the Space Lab experiment more impressive

if which of the following were true?

(A) The results of the Space Lab experiment could be

replicated in producing other kinds of crystals in

addition to lysozyme protein.

(B) The device used in the experiment produced larger

crystals on Earth than it did in space.

(C) The size of the crystals produced in the experiment

exceeded the size of crystals grown in

Earth laboratories using standard techniques.

(D)The cost of producing the crystals in space exceeded

that of producing them using standard laboratory

techniques.

(E) The standard techniques used in Earth laboratories

were modified in the Space Lab experiment due to

the effects of microgravity.

2.Which of the following can be inferred from the

passage about the device used to grow crystals in the

Space Lab experiment?

(A) The device is more expensive to manufacture than are

the devices used in standard techniques in an Earth

laboratory.

(B) The device has not been used to grow crystals in

space since the Space Lab experiment of 1983.

(C) Crystals grown in the device on Earth tend to be

much smaller than crystals grown in it in space.

(D) Crystals grown in the device in space have been

exceeded in size by crystals grown in subsequent

experiments in space using other devices.

(E) The experiments in which the device was used

were conducted with proper controls.

An experimental version of the traditional scholarly

methods course was designed to raise students'

consciousness about the usefulness of traditional learning

for any modern critic or theorist. To minimize the artificial

aspects of the conventional course, the usual procedure of

assigning a large number of small problems drawn from the

entire range of historical periods was abandoned, though

this procedure has the obvious advantage of at least

superficially familiarizing students with a wide range of

reference sources. Instead, students were engaged in a

collective effort to do original work on a neglected

eighteenth-century writer, Elizabeth Griffith, to give them

an authentic experience of literary scholarship and to

inspire them to take responsibility for the quality of their

own work. Griffith's work presented a number of

advantages for this particular pedagogical purpose. The

body of extant scholarship on Griffith was so tiny that it

could all be read in a day. In addition, because Griffith was

successful in the eighteenth century, her exclusion from the

canon and virtual disappearance from literary history also

helped raise issues concerning the current canon.

(179 words)

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3. The author of the passage suggests that which of the

following is a disadvantage of the strategy employed in

the experimental scholarly methods course?

(A) Students were not given an opportunity to study

women writers outside the canon.

(B) Students' original work would not be appreciated

by recognized scholars.

(C) Little scholarly work has been done on the work

of Elizabeth Griffith.

(D) Most of the students in the course had had little

opportunity to study eighteenth-century literature.

(E) Students were not given an opportunity to

encounter certain sources of information that could

prove useful in their future studies.

4. It can be inferred that the author of the passage con-

siders traditional scholarly methods courses to be

(A) irrelevant to the work of most students

(B) inconsequential because of their narrow focus

(C) unconcerned about the accuracy of reference

sources

(D) too superficial to establish important facts about

authors

(E) too wide-ranging to approximate genuine scholarly

activity

5. In the context in which it appears, "canon" most nearly

means

A dogma

B classic

C tour de force

D ordinance

E tenet

Experiments show that insects can function as pollinators

of cycads, rare, palmlike tropical plants. Furthermore,

cycads removed from their native habitats—and therefore

from insects native to those habitats—are usually infertile.

Nevertheless, anecdotal reports of wind pollination in

cycads cannot be ignored. The structure of cycads male

cones is quite consistent with the wind dispersal of pollen,

clouds of which are released from some of the larger cones.

The male cone of *Cycas circinalis*, for example, sheds

almost 100 cubic centimeters of pollen, most of which is

probably dispersed by wind. Furthermore, the structure of

most female cycad cones seems inconsistent with direct

pollination by wind. Only in the *Cycas* genus are the

females' ovules accessible to airborne pollen, since only in

this genus are the ovules surrounded by a loose aggregation

of megasporophylls rather than by a tight cone.

(141 words)

207

**For the following question, consider each of the**

**choices separately and select all that apply**

6. The passage suggests that which of the following is

true of the structure of cycad cones?

A The structure of cycad cones provides conclusive

evidence in favor of one particular explanation

of cycad pollination.

B The structure of male cycad cones rules out a

possible mechanism for cycad pollination that is

suggested by the structure of most female cycad

cones.

C The structure of male cycad cones is consistent

with a certain means of cycad pollination, but

that means is inconsistent with the structure of

most female cycad cones.

7. The evidence in favor of insect pollination of cycads

presented in the second sentence would be more

convincing if which of the following were also true?

(A) Only a small variety of cycad species can be

successfully transplanted.

(B) Cycads can sometimes be pollinated by means

other than wind or insects.

(C) Insects indigenous to regions to which cycads are

transplanted sometimes feed on cycads.

(D) Winds in the areas to which cycads are usually

transplanted are similar to winds in cycads'

native habitats.

(E) The transplantation of cycads from one region to

another usually involves the accidental removal

and introduction of insects as well.

8. That sales can be increased by the presence of sunlight

within a store has been shown by the experience of

the only Savefast department store with a large

skylight. The skylight allows sunlight into half of the

store, reducing the need for artificial light. The rest of

the store uses only artificial light. Since the store

opened two years ago, the departments on the sunlit

side have had substantially higher sales than the other

departments.

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Which of the following, if true, most strengthens the

argument?

(A) On particularly cloudy days, more artificial light

is used to illuminate the part of the store under

the skylight.

(B) When the store is open at night, the departments

in the part of the store under the skylight have

sales that are no higher than those of other

departments.

(C) Many customers purchase items from

departments in both parts of the store on a single

shopping trip.

(D) Besides the skylight, there are several significant

architectural differences between the two parts of

the store.

(E) The departments in the part of the store under the

skylight are the departments that generally have

the highest sales in other stores in the Savefast

chain.

Influenced by the view of some twentieth-century

feminists that women's position within the family is one of

the central factors determining women's social position,

some historians have underestimated the significance of the

woman suffrage movement. These historians contend that

nineteenth-century suffragism was less radical and, hence,

less important than, for example, the moral reform

movement or domestic feminism—two nineteenth-century

movements in which women struggled for more power and

autonomy within the family. True, by emphasizing these

struggles, such historians have broadened the conventional

view of nineteenth-century feminism, but they do a

historical disservice to suffragism. Nineteenth-century

feminists and anti-feminist alike perceived the suffragists'

demand for enfranchisement as the most radical element in

women's protest, in part because suffragists were

demanding power that was not based on the institution of

9. Select the sentence that includes a qualification of the

author‘s critical attitude toward the study of the historians

as they are described in the passage.

**For the following question, consider each of the**

**choices separately and select all that apply**

10. The passage provides information to support which of

the following statements about the historians discussed in

the passage EXCEPT

A They rely too greatly on the perceptions of the actual

participants in the events they study.

B Their assessment of the significance of nineteenth-

century suffragism differs considerably from that

of nineteenth-century feminists.

C They devote too much attention to nineteenth-

the family, women's traditional sphere.

(135 words)

209

century suffragism at the expense of more

radical movements that emerged shortly after

the turn of the century.

第一部分

**Exe 1**

答

案

**Exe 6**

1. C

2. B

3. D

1. E 2. E

4. D 5. E

6. D

3. B

5. AC

4. BC

6. E 7. ―Part of this response was…‖

7. AB

8. A 9. E 10. B

8. A 9. D 10. B

11. D

11. Without invoking gods or demons… 12. D 13. C

**Exe 2**

12. E 13. ―I have been increasingly impressed with‖

**Exe 7**

1. A 2. D 3. D

1. C

2. A

4. AB

6. B

5. E

3. B

6. C

4. E 5. A

7. C

8. A 9. AB

10. E

7. C

8. A 9. ―Their present high standing is due to‖

11. ABC

12. E

10. C

11. BC 12. E 13. A

13. ―The fact that distantly related kin…‖

**Exe 8**

**Exe 3**

1. C

1. BC 2. C

2. A

3. E

3. D 4. C

5. A

4. C

5. ABC

6. C

6. B

7. A 8. A

7. AC

8. ―I do not mean that‖

9. E 10. ―The Amazons were often characterized… ‖

9. D

11. D

10. C

11. E 12. D

12. D 13. BC

**Exe 9**

**Exe 4**

1. D 2. A 3. B

1. C

2. AC

4. D 5. B

6. C

7. C

3. D 4. A 5. E 6. E

7. A 8. A

8. B

10. C

9. AC

9. A 10. B

**Exe 5**

11. D

11. A 12. C

**Exe 10**

13. ―Undoubtedly such elements‖

1. D 2. B

3. AB

4. C 5. E

1. A 2. C

6. B

7. ―Long before the Romantics stressed intuition‖

3. BC 4. C

5. D 6. E

8. C

7. D 8. E 9. C

9. D 10. AC

10. AC

11. C

12. B

11. A 12. E

210

**Exe 11**

**Exe 14**

1. D 2. B

3. B

4.B

1. C. 2. C 3 D

5. AB

6. B

7."For example, some of the large

4. B

sedentary" 8. E

5. A C

6. D.

9. D

7. C 8. B. 9. A

10. E 11. AB

13. D

**Exe 12**

12. A

10. D 11. It is now established...

12. A

**Exe 15**

1. C

2. A 3. E

1. Other workers quickly devoured... 2. A 3. B

4. A 5. ABC

6. "However, the variations are large

4. A B C

5. But the diabetic generally receives ...

enough" 7. D

8. D 9. A

10. C

11. D 12. C 13. B

**Exe 13**

1. C 2. B 3. But the recent discovery...

4. A

6.B 7. D 8. C

9. AC 10. D 11. A 12. B

**Exe 16**

1. AB 2. Some researchers point out that... 3. A

4. A 5. E

6. A 7. BC

8. C

5. D.

6. AB

7.

They were fighting, albeit

9. E 10. B

discreetly, ... 8. A

9. C

10. A 11. A 12. E

211

11. D 12. C 13. The difference between the two is ...

第二部分

**Exe 17**

1. A 2. A 3. B

4. B

5. D

**Exe 22**

1. D 2. B

3. E 4. AC

5. D

6. B

8. B

7. D

6. E 7. ―But the play's complex view… ‖ 8. C

9. E 10. A

9. ―The critic‘s knowledge and training are‖ 10. D

**Exe 23**

**Exe 18**

1. BC 2. D 3. B

1. B

4. B

2. A 3. E

4. C

5. D 6. B

7. B

5. E

8. E

9. ―Yet this rush into practical applications‖

10. C

**Exe 19**

1. E 2. D 3. B

4. D

6. B

7. A 8. ―This dichotomy has its uses…‖ 9. E 10.

ABC

**Exe 24**

1. E

2. ―Practically speaking, the artistic maturing...‖ 3. D

5. A 6. D

4. ABC

5. C

6. C

7. A 8. A

7. E 8. E

9. ABC

10. "When speaking of Romare Bearden"

9. D 10. C

**Exe 20**

1. D 2. ―These minerals can be dated…‖

**Exe 25**

1. A 2. C

3. B

4. AB

5. C

6. B

3. A 4. D 5. AC

6. B

7. A 8. B

7. B

9. B

8. C

9. B

10. AB

**Exe 21**

1. D

10. E

**Exe 26**

1. A

2. D 3. A 4. B

6. E

5. A

2. B

4. B

3. ABC

5. E

7. D

6. D 7. C

8. E 9. A

8. B

9. ABC

10. D

10. ―She shunned bodily ornamentation‖

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**Exe 27**

1. D

**Exe 32**

1. A

2. E 3. E 4. BC

6. D

5. A

2. B

6. B

3. A 4. D 5. D

7. BC

7. B

8. ―The Earth's magnetic field is generated‖

8. D

9. E 10. B

9. C

10. B

**Exe 28**

**Exe 33**

1. ABC

2. B

3. A

1. C

2. B

4. B

5. C

6. E 7. C

3. C

4. D 5. A 6. D

8. ―Perhaps he believed that‖

9. D

10. B

**Exe 29**

7. A

8."The advantage of digital over photographic imaging "

9. D 10. C

**Exe 34**

1. B

3. D

2. ABC

1. C

3. AB

2. E

4. D 5. E 6. D

4. A 5. D 6. C

7. A

7. E 8. ―Many of the important effects‖

8. B

9. A

9. E 10. D

**Exe 30**

1. A 2. D

10."But when clouds were incorporated"

**Exe 35**

1. ―Creative ideas not only produce‖ 2. C

3.C

4. B 5. D 6. A

3. BC 4. E 5. B

7. C

6. C

7. D 8. E 9. D

8. B

9. C

10. E

**Exe 31**

10. B

**Exe 36**

1. A

1. C

2. C

2. A 3. D 4. "The trees' own defenses raise...." 5. BC

3. E 4. E 5. B

6. A 7. D

6. C

7. D

8. B

9. E 10. C

[THE END]

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8. B

9. ―True, by emphasizing these struggles‖ 10. AC