

## SECTION III

Time—35 minutes

27 Questions

**Directions:** Each passage in this section is followed by a group of questions to be answered on the basis of what is stated or implied in the passage. For some of the questions, more than one of the choice could conceivably answer the question. However, you are to choose the best answer; that is, the response that most accurately and completely answers the question, and blacken the corresponding space on your answer sheet.

Modern architecture has been criticized for emphasizing practical and technical issues at the expense of aesthetic concerns. The high-rise buildings constructed throughout the industrialized

- (5) world in the 1960s and 1970s provide ample evidence that cost-efficiency and utility have become the overriding concerns of the modern architect. However, Otto Wagner's seminal text on modern architecture, first published in Germany in
- (10) 1896, indicates that the failures of modern architecture cannot be blamed on the ideals of its founders.

Wagner's *Modern Architecture* called for a new style based on modern technologies and modes of

- (15) construction. He insisted that there could be no return to traditional, preindustrial models; only by accepting wholeheartedly the political and technological revolutions of the nineteenth century could the architect establish the forms appropriate
- (20) to a modern, urban society. "All modern creations," Wagner wrote, "must correspond to the new materials and demands of the present...must illustrate our own better, democratic, self-confident, ideal nature," and must incorporate the new
- (25) "colossal technical and scientific achievements" of the age. This would indeed seem to be the basis of a purely materialist definition of architecture, a prototype for the simplistic form-follows-function dogma that opponents have identified as the
- (30) intellectual basis of modern architecture.

But the picture was more complex, for Wagner was always careful to distinguish between art and engineering. Ultimately, he envisaged the architect developing the skills of the engineer without losing

- (35) the powers of aesthetic judgment that Wagner felt were unique to the artist. "Since the engineer is seldom a born artist and the architect must learn as a rule to be an engineer, architects will in time succeed in extending their influence into the realm
- (40) occupied by the engineers, so that legitimate aesthetic demands can be met in a satisfactory way." In this symbiotic relationship essential to Modernism, art was to exercise the controlling influence.

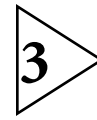
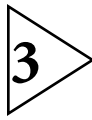
- (45) No other prospect was imaginable for Wagner, who was firmly rooted as a designer and, indeed, as a teacher in the Classical tradition. The apparent inconsistency of a confessed Classicist advising against the mechanical imitation of historical
- (50) models and arguing for new forms appropriate to

the modern age created exactly the tension that made Wagner's writings and buildings so

- interesting. While he justified, for example, the choice of a circular ground plan for churches in
- (55) terms of optimal sight-lines and the technology of the gasometer, the true inspiration was derived from the centralized churches of the Italian Renaissance. He acknowledged as a rationalist that there was no way back to the social and
- (60) technological conditions that had produced the work of Michelangelo or Fischer von Erlach, but he recognized his emotional attachment to the great works of the Italian Renaissance and Austrian Baroque.

1. Which one of the following best expresses the main idea of the passage?
- (A) Modern architecture has been criticized for emphasizing practical and technical issues and for failing to focus on aesthetic concerns.
- (B) Critics have failed to take into account the technological innovations and aesthetic features that architects have incorporated into modern buildings.
- (C) Wagner's *Modern Architecture* provides architects with a chronicle of the origins of modern architecture.
- (D) Wagner's *Modern Architecture* indicates that the founders of modern architecture did not believe that practical issues should supersede the aesthetic concerns of the past.
- (E) Wagner's seminal text, *Modern Architecture*, provides the intellectual basis for the purely materialistic definition of modern architecture.

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2. According to the passage, Wagner asserts which one of the following about the roles of architect and engineer?
  - (A) The architect should make decisions about aesthetic issues and leave decisions about technical matters to the engineer.
  - (B) The engineer has often developed the powers of aesthetic judgment previously thought to be unique to the architect.
  - (C) The judgment of the engineer should be as important as the judgment of the architect when decisions are made about aesthetic issues.
  - (D) The technical judgment of the engineer should prevail over the aesthetic judgment of the architect in the design of modern buildings.
  - (E) The architect should acquire the knowledge of technical matters typically held by the engineer.
  
3. The passage suggests that Wagner would be LEAST likely to agree with which one of the following statements about classical architecture and the modern architect?
  - (A) The modern architect should avoid the mechanical imitation of the models of the Italian Renaissance and Austrian Baroque.
  - (B) The modern architect cannot design buildings appropriate to a modern, urban society and still retain emotional attachments to the forms of the Italian Renaissance and Austrian Baroque.
  - (C) The modern architect should possess knowledge of engineering as well as of the architecture of the past.
  - (D) The modern architect should not base designs on the technological conditions that underlay the designs of the models of the Italian Renaissance and Austrian Baroque.
  - (E) The designs of modern architects should reflect political ideals different from those reflected in the designs of classical architecture.
  
4. The passage suggests which one of the following about the quotations from *Modern Architecture* cited in the second paragraph?
  - (A) They represent the part of Wagner's work that has had the least influence on the architects who designed the high-rise buildings of the 1960s and 1970s.
  - (B) They describe the part of Wagner's work that is most often evoked by proponents of Wagner's ideas on art and technology.
  - (C) They do not adequately reflect the complexity of Wagner's ideas on the use of modern technology in architecture.
  - (D) They reflect Wagner's active participation in the political revolutions of the nineteenth century.
  - (E) They provide an overview of Wagner's ideas on the relationship between art and technology.
  
5. The author of the passage states which one of the following about the concerns of modern architecture?
  - (A) Cost-efficiency, utility, and aesthetic demands are the primary concerns of the modern architect.
  - (B) Practical issues supersede aesthetic concerns in the design of many modern buildings.
  - (C) Cost-efficiency is more important to the modern architect than are other practical concerns.
  - (D) The design of many new buildings suggests that modern architects are still inspired by architectural forms of the past.
  - (E) Many modern architects use current technology to design modern buildings that are aesthetically pleasing.
  
6. The author mentions Wagner's choice of a "circular ground plan for churches" (line 54) most likely in order to
  - (A) provide an example of the kinds of technological innovations Wagner introduced into modern architecture
  - (B) provide an example of Wagner's dismissal of historical forms from the Italian Renaissance
  - (C) provide an example of a modern building where technological issues were much less significant than aesthetic demands
  - (D) provide evidence of Wagner's tendency to imitate Italian Renaissance and Austrian Baroque models
  - (E) provide evidence of the tension between Wagner's commitment to modern technology and to the Classical tradition
  
7. The passage is primarily concerned with
  - (A) summarizing the history of a debate
  - (B) explaining a traditional argument
  - (C) describing and evaluating a recent approach
  - (D) justifying a recent criticism by presenting new evidence
  - (E) supporting an assertion by discussing an important work

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In order to explain the socioeconomic achievement, in the face of disadvantages due to racial discrimination, of Chinese and Japanese immigrants to the United States and their

- (5) descendants, sociologists have typically applied either culturally based or structurally based theories—but never both together. To use an economic metaphor, culturally based explanations assert the importance of the supply side of the labor
- (10) market, emphasizing the qualities immigrant groups bring with them for competition in the United States labor market. Such explanations reflect a human-capital perspective in which status attainment is seen as a result of individuals' ability
- (15) to generate resources. Structurally based explanations, on the other hand, examine the market condition of the immigrants' host society, particularly its discriminatory practices and their impact on the status attainment process of
- (20) immigrant groups. In the economic metaphor, structural explanations assert the importance of the demand side of the labor market.

In order to understand the socioeconomic mobility of Chinese and Japanese immigrants and

- (25) their descendants, only an analysis of supply-side and demand-side factors together, in the context of historical events, will suffice. On the cultural or supply side, differences in immigration pattern and family formation resulted in different rates of
- (30) socioeconomic achievement for Chinese and Japanese immigrants. For various reasons, Chinese immigrants remained sojourners and did not (except for urban merchants) establish families. They were also hampered by ethnic conflict in the
- (35) labor market. Japanese immigrants, on the other hand, were less constrained, made the transition from sojourner to settler within the first two decades of immigration, and left low-wage labor to establish small businesses based on a household
- (40) mode of production. Chinese sojourners without families were more vulnerable to demoralization, whereas Japanese immigrants faced societal hostility with the emotional resources provided by a stable family life. Once Chinese immigrants began
- (45) to establish nuclear families and produce a second generation, instituting household production similar to that established by Japanese immigrants, their socioeconomic attainment soon paralleled that of Japanese immigrants and their descendants.

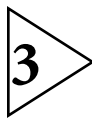
- (50) On the structural or demand side, changes in institutional constraints, immigration laws, labor markets, and societal hostility were rooted in the dynamics of capitalist economic development. Early capitalist development generated a demand for
- (55) low-wage labor that could not be fulfilled. Early Chinese and Japanese immigration was a response to this demand. In an advanced capitalist economy, the demand for immigrant labor is more differentiated: skilled professional and technical
- (60) labor fills empty positions in the primary labor

market and, with the traditional unskilled low-wage labor, creates two immigrant streams. The high levels of education attained by the descendants of Chinese and Japanese immigrants and their

(65) concentration in strategic states such as California paved the way for the movement of the second generation into the expanding primary labor market in the advanced capitalist economy that existed after the Second World War.

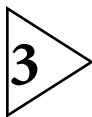
8. Which one of the following best expresses the main idea of the passage?
- (A) The socioeconomic achievement of Chinese and Japanese immigrants and their descendants is best explained by a historical examination of the economic structures prevalent in the United States when such immigrant groups arrived.
- (B) The socioeconomic achievement of Chinese and Japanese immigrants and their descendants is best explained by an examination of their cultural backgrounds, in particular their level of educational attainment.
- (C) The socioeconomic achievement of Chinese and Japanese immigrants and their descendants has taken place in the context of a culturally based emphasis on the economic welfare of the nuclear family.
- (D) Only the market structure of the capitalist economy of the United States in which supply has historically been regulated by demand can account for the socioeconomic achievement of Chinese and Japanese immigrants and their descendants.
- (E) Only an analysis that combines an examination of the culture of Chinese and Japanese immigrant groups and the socioeconomic structure of the host country can adequately explain the socioeconomic achievement of Chinese and Japanese immigrants and their descendants.
9. Which one of the following can best be described as a supply-side element in the labor market, as such elements are explained in the passage?
- (A) concentration of small businesses in a given geographical area
- (B) need for workers with varying degrees of skill
- (C) high value placed by immigrants on work
- (D) expansion of the primary labor market
- (E) development of an advanced capitalist economy

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10. Which one of the following best states the function of the author's mention of "two immigrant streams" (line 62)?
- (A) It demonstrates the effects of changes in human capital.
  - (B) It illustrates the operation of the primary labor market.
  - (C) It explains the nature of early Chinese and Japanese immigration.
  - (D) It characterizes the result of changing demand-side factors.
  - (E) It underscores an influence on the labor market.
11. It can be inferred that the author's analysis of the socioeconomic achievement of Chinese and Japanese immigrants and their descendants differs from that of most sociologists primarily in that most sociologists
- (A) address the effects of the interaction of causal factors
  - (B) exclude the factor of a developing capitalist economy
  - (C) do not apply an economic metaphor
  - (D) emphasize the disadvantageous effects of racial discrimination
  - (E) focus on a single type of theoretical explanation
12. It can be inferred that which one of the following was an element of the experience of both Chinese and Japanese immigrants in the United States?
- (A) initial status as sojourners
  - (B) slow accumulation of capital
  - (C) quick transition from laborer to manager
  - (D) rapid establishment of nuclear families
  - (E) rapid acquisition of technical skills
13. The author is primarily concerned with
- (A) advancing a synthesis of approaches to an issue
  - (B) challenging a tentative answer to a question
  - (C) evaluating the soundness of theories
  - (D) resolving the differences between schools of thought
  - (E) outlining the achievements of a group

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Although the legal systems of England and the United States are superficially similar, they differ profoundly in their approaches to and uses of legal reasons: substantive reasons are more common

- (5) than formal reasons in the United States, whereas in England the reverse is true. This distinction reflects a difference in the visions of law that prevail in the two countries. In England the law has traditionally been viewed as a system of rules; the
- (10) United States favors a vision of law as an outward expression of the community's sense of right and justice.

Substantive reasons, as applied to law, are based on moral, economic, political, and other

- (15) considerations. These reasons are found both "in the law" and "outside the law," so to speak. Substantive reasons inform the content of a large part of the law: constitutions, statutes, contracts verdicts, and the like. Consider, for example, a
- (20) statute providing that "no vehicles shall be taken into public parks." Suppose that no specific rationales or purposes were explicitly written into this statute, but that it was clear (from its legislative history) that the substantive purpose of the statute
- (25) was to ensure quiet and safety in the park. Now suppose that a veterans' group mounts a World War II jeep (in running order but without a battery) as a war memorial on a concrete slab in the park, and charges are brought against its members. Most
- (30) judges in the United States would find the defendants not guilty because what they did had no adverse effect on park quiet and safety.

Formal reasons are different in that they frequently prevent substantive reasons from coming

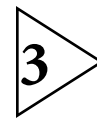
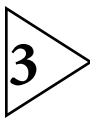
(35) into play, even when substantive reasons are explicitly incorporated into the law at hand. For example, when a document fails to comply with stipulated requirements, the court may render the document legally ineffective. A will requiring

(40) written witness may be declared null and void and, therefore, unenforceable for the formal reason that the requirement was not observed. Once the legal rule—that a will is invalid for lack of proper witnessing—has been clearly established, and the

(45) legality of the rule is not in question, application of that rule precludes from consideration substantive arguments in favor of the will's validity or enforcement.

- Legal scholars in England and the United States
- (50) have long bemused themselves with extreme examples of formal and substantive reasoning. On the one hand, formal reasoning in England has led to wooden interpretations of statutes and an unwillingness to develop the common law through
- (55) judicial activism. On the other hand, freewheeling substantive reasoning in the United States has resulted in statutory interpretations so liberal that the texts of some statutes have been ignored altogether.

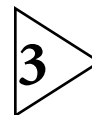
14. Which one of the following best describes the content of the passage as a whole?
- (A) an analysis of similarities and differences between the legal systems of England and the United States
- (B) a reevaluation of two legal systems with the use of examples
- (C) a contrast between the types of reasons embodied in the United States and English legal systems
- (D) an explanation of how two distinct visions of the law shaped the development of legal reasoning
- (E) a presentation of two types of legal reasons that shows the characteristics they have in common
15. It can be inferred from the passage that English judges would be likely to find the veterans' group discussed in the second paragraph guilty of violating the statute because
- (A) not to do so would encourage others to act as the group did
- (B) not to do so would be to violate the substantive reasons underlying the law
- (C) the veterans failed to comply with the substantive purpose of the statute
- (D) the veterans failed to demonstrate that their activities had no adverse effect on the public
- (E) the veterans failed to comply with the stipulated requirements of the statute
16. From the discussion of wills in the third paragraph it can be inferred that substantive arguments as to the validity of a will might be considered under which one of the following circumstances?
- (A) The legal rule requiring that a will be witnessed in writing does not stipulate the format of the will.
- (B) The legal rule requiring that a will be witnessed stipulates that the will must be witnessed in writing by two people.
- (C) The legal ruling requiring that a will be witnessed in writing stipulates that the witnessing must be done in the presence of a judge.
- (D) A judge rules that the law requires a will to be witnessed in writing regardless of extenuating circumstances.
- (E) A judge rules that the law can be interpreted to allow for a verbal witness to a will in a case involving a medical emergency.



17. The author of the passage makes use of all of the following in presenting the discussion of the English and the United States legal systems EXCEPT
- (A) comparison and contrast
  - (B) generalization
  - (C) explication of terms
  - (D) a chronology of historical developments
  - (E) a hypothetical case
18. Which one of the following best describes the function of the last paragraph of the passage?
- (A) It presents the consequences of extreme interpretations of the two types of legal reasons discussed by the author.
  - (B) It shows how legal scholars can incorrectly use extreme examples to support their views.
  - (C) It corrects inaccuracies in legal scholars' views of the nature of the two types of legal systems.
  - (D) It suggests how characterizations of the two types of legal reasons can become convoluted and inaccurate.
  - (E) It presents scholars' characterizations of both legal systems that are only partially correct.
19. The author of the passage suggests that in English law a substantive interpretation of a legal rule might be warranted under which one of the following circumstances?
- (A) Social conditions have changed to the extent that to continue to enforce the rule would be to decide contrary to present-day social norms.
  - (B) The composition of the legislature has changed to the extent that to enforce the rule would be contrary to the views of the majority in the present legislative assembly.
  - (C) The legality of the rule is in question and its enforcement is open to judicial interpretation.
  - (D) Individuals who have violated the legal rule argue that application of the rule would lead to unfair judicial interpretations.
  - (E) Superior court judges have consistently ruled in decisions regarding the interpretation of the legal rule.
20. According to the passage, which one of the following statements about substantive reasons is true?
- (A) They may be written into laws, but they may also exert an external influence on the law.
  - (B) They must be explicitly written into the law in order to be relevant to the application of the law.
  - (C) They are legal in nature and determine particular applications of most laws.
  - (D) They often provide judges with specific rationales for disregarding the laws of the land.
  - (E) They are peripheral to the law, whereas formal reasons are central to the law.

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How does the brain know when carbohydrates have been or should be consumed? The answer to this question is not known, but one element in the explanation seems to be the neurotransmitter

- (5) serotonin, one of a class of chemical mediators that may be released from a presynaptic neuron and that cause the transmission of a nerve impulse across a synapse to an adjacent postsynaptic neuron. In general, it has been found that drugs that selectively
- (10) facilitate serotonin-mediated neurotransmission tend to cause weight loss, whereas drugs that block serotonin-mediated transmission often have the opposite effect: they often induce carbohydrate craving and consequent weight gain.
- (15) Serotonin is a derivative of tryptophan, an amino acid that is normally present at low levels in the bloodstream. The rate of conversion is affected by the proportion of carbohydrates in an individual's diet: carbohydrates stimulate the secretion of
- (20) insulin, which facilitates the uptake of most amino acids into peripheral tissues, such as muscles. Blood tryptophan levels, however, are unaffected by insulin, so the proportion of tryptophan in the blood relative to the other amino acids increases
- (25) when carbohydrates are consumed. Since tryptophan competes with other amino acids for transport across the blood-brain barrier into the brain, insulin secretion indirectly speeds tryptophan's entry into the central nervous system
- (30) where, in a special cluster of neurons, it is converted into serotonin.

The level of serotonin in the brain in turn affects the amount of carbohydrate an individual chooses to eat. Rats that are allowed to choose among

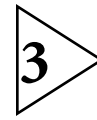
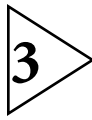
- (35) synthetic foods containing different proportions of carbohydrate and protein will normally alternate between foods containing mostly protein and those containing mostly carbohydrate. However, if rats are given drugs that enhance the effect of serotonin,
- (40) the rats' carbohydrate intake is reduced. On the other hand, when rats are given drugs that interrupt serotonin-mediated neurotransmission, their brains fail to respond when carbohydrates are eaten, so the desire for them persists.

- (45) In human beings a serotoninlike drug, d-fenfluramine (which releases serotonin into brain synapses and then prolongs its action by blocking its reabsorption into the presynaptic neuron), selectively suppresses carbohydrate snacking (and
- (50) its associated weight gain) in people who crave carbohydrates. In contrast, drugs that block serotonin-mediated transmission or that interact with neurotransmitters other than serotonin have the opposite effect: they often induce carbohydrate
- (55) craving and subsequent weight gain. People who crave carbohydrates report feeling refreshed and invigorated after eating a carbohydrate-rich meal (which would be expected to increase brain serotonin levels). In contrast, those who do not
- (60) crave carbohydrates become sleepy following a

high-carbohydrate meal. These findings suggest that serotonin has other effects that may be useful indicators of serotonin levels in human beings.

- 21. Which one of the following best states the main idea of the passage?
  - (A) The body's need for carbohydrates varies with the level of serotonin in the blood.
  - (B) The body's use of carbohydrates can be regulated by the administration of serotoninlike drugs.
  - (C) The role of serotonin in regulating the consumption of carbohydrates is similar in rats and in humans.
  - (D) The body's desire for carbohydrates can be influenced by serotonin or serotoninlike drugs.
  - (E) Tryptophan initiates a chain of events that regulates the body's use of carbohydrates.
- 22. The term "rate" (line 17) refers to the rate at which
  - (A) serotonin is produced from tryptophan
  - (B) carbohydrates are taken into the body
  - (C) carbohydrates stimulate the secretion of insulin
  - (D) insulin facilitates the uptake of amino acids into peripheral tissues
  - (E) tryptophan enters the bloodstream
- 23. It can be inferred that a person is likely to crave carbohydrates when
  - (A) the amount of insulin produced is too high
  - (B) the amount of serotonin in the brain is too low
  - (C) more tryptophan than usual crosses the blood-brain barrier
  - (D) neurotransmission by neurotransmitters other than serotonin is interrupted
  - (E) amino acids other than tryptophan are taken up by peripheral tissues

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24. The information in the passage indicates that if human beings were given a drug that inhibits the action of serotonin, which one of the following might be expected to occur?
- (A) Subjects would probably show a preference for carbohydrate-rich snacks rather than protein-rich snacks.
  - (B) Subjects would probably become sleepy after eating a carbohydrate-rich meal.
  - (C) Subjects would be more likely to lose weight than before they took the drug.
  - (D) Subjects' blood tryptophan levels would probably increase.
  - (E) Subjects' desire for both carbohydrates and proteins would increase.
25. The primary purpose of the second paragraph in the passage is to
- (A) provide an overview of current research concerning the effect of serotonin on carbohydrate consumption
  - (B) contrast the role of tryptophan in the body with that of serotonin
  - (C) discuss the role of serotonin in the transmission of neural impulses
  - (D) explain how the brain knows that carbohydrates should be consumed
  - (E) establish a connection between carbohydrate intake and the production of serotonin
26. It can be inferred that after a person has taken d-fenfluramine, he or she will probably be
- (A) inclined to gain weight
  - (B) sleepy much of the time
  - (C) unlikely to crave carbohydrates
  - (D) unable to sleep as much as usual
  - (E) likely to secrete more insulin than usual
27. The author's primary purpose is to
- (A) defend a point of view
  - (B) correct a misconception
  - (C) assess conflicting evidence
  - (D) suggest new directions for investigation
  - (E) provide information that helps explain a phenomenon

## S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT WORK ON ANY OTHER SECTION IN THE TEST.