

# **GRE**

## **Verbal Reasoning Assessment**

### **Reading Comprehension**

Total Questions: 52

Duration: 75 Min

(This passage is excerpted from an article that was published in 1982.)

### **Passage 1**

Warm-blooded animals have elaborate physiological controls to maintain constant body temperature (in humans, 37° C). Why then during sickness should temperature rise, apparently increasing stress on the infected organism? 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 because their body temperature can be controlled in the laboratory. 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. Research to determine whether similar phenomena occur in warm-blooded animals is sorely needed.

**1. The passage is primarily concerned with attempts to determine**

- A. the role of siderophores in the synthesis of serum iron
- B. new treatments for infections that are caused by *A. hydrophilia*
- C. the function of fever in warm-blooded animals
- D. the mechanisms that ensure constant body temperature
- E. Iron utilization in cold-blooded animals

**2. 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

**3. Which of the following can be inferred about warm-blooded animals solely on the basis of information in the passage?**

- A. The body temperatures of warm-blooded animals cannot be easily controlled in the laboratory.
- B. Warm-blooded animals require more iron in periods of stress than they do at other times.
- C. Warm-blooded animals are more comfortable at an environmental temperature of 37° C than they are at a temperature of 42° C.
- D. In warm-blooded animals, bacteria are responsible for the production of siderophores, which, in turn, make iron available to the animal.
- E. In warm-blooded animals, infections that lead to fever are usually traceable to bacteria.

**4. If it were to be determined that "similar phenomena occur in warm-blooded animals" (lines 21-22), 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

**Directions:** Each passage in this group is followed by questions based on its content. After reading a passage, choose the best answer to each question. Answer all questions following a passage on the basis of what is stated or Implied in that passage.

(This passage is from an article published in 1973)

**Passage 2**

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 similarity of task. Opportunities seem certain to arise. The growing emphasis on deterrence is bound to offer increasing scope for women to become involved in novel types of noncombat military assignments.

**5. The primary purpose of the passage is to**

- A.** Present an overview of the different types of assignments available to women in the new United States all-volunteer armed forces
- B.** Present a reasoned prognosis of the status of women in the new United States all-volunteer armed forces
- C.** Present the new United States all-volunteer armed forces as a model case of equal employment policies in action
- D.** analyze reforms in the new United States all-volunteer armed forces necessitated by the increasing number of women in the military
- E.** analyze the use of functional equivalence as a substitute for occupational equality in the new United States all-volunteer armed forces

6. According to the passage, despite the United States armed forces' commitment to occupational equality for women in the military, certain other factors preclude women's
- A. receiving equal pay for equal work
  - B. having access to positions of responsibility at most levels
  - C. drawing assignments from a wider range of assignments than before
  - D. benefiting from opportunities arising from new noncombat functions
  - E. being assigned all of the military tasks that are assigned to men
7. 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. The level of awareness on the part of the larger society of military issues
  - D. A decline in the proportion of deterrence-oriented noncombat assignments
  - E. Restrictive past policies governing the military assignments open to women
8. The "dramatic gains for women" (line 5) and the attitude, as described in lines 11-12, of a "significant portion of the larger society" are logically related to each other inasmuch as the author puts forward the latter as
- A. a public response to achievement of the former
  - B. the major reason for absence of the former
  - C. a precondition for any prospect of achieving the former
  - D. a catalyst for a further extension of the former
  - E. a reason for some of the former being lost again

### **Passage 3**

Of the thousands of specimens of meteorites found on Earth and known to science; only about 100 are igneous; that is they have undergone melting by volcanic action at some time since the planets were first formed. These igneous meteorites are known as achondrites because they lack chondrules--small stony spherules found in the thousands of meteorites (called "chondrites") composed primarily of unaltered minerals that condensed from dust and gas at the origin of the solar system. Achondrites are the only known samples of volcanic rocks originating outside the Earth-Moon-system. Most are thought to have been dislodged by interbody impact from asteroids, with diameters from 10 to 500 kilometers, in solar orbit between Mars and Jupiter.

Shergottites, the name given to three anomalous achondrites 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 most meteorites appear to derive from comparatively small bodies. Shergottites exhibit properties that their source was a large planet, conceivably Mars. In order to account for such an unlikely source, some unusual factor must be invoked, because the Impact needed to accelerate a fragment of rock to escape the gravitational field of a body even as small as the Moon is so great that no meteorites of lunar origin have been discovered.

While some scientists speculate that shergottites derive from  $I_0$  (a volcanically active moon of Jupiter) recent measurements suggest that since  $I_0$ '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  $I_0$  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. The great objection to the Martian origin of shergottites is the absence of lunar meteorites on Earth. An impact capable of ejecting a fragment of the Martian surface into an Earth-intersecting orbit is even less probable than such an event on the Moon, in view of the Moon's smaller size and closer proximity to Earth. A recent study suggests, however, that permafrost ices below the surface of Mars may have altered the effects of impact on it. If the ices had been rapidly vaporized by an impacting object, the expanding gases might have helped the ejected fragments reach escape velocity. Finally analyses performed by space probes show a remarkable chemical similarity between Martian soil and the shergottites.

**9. The passage implies which of the following about shergottites?**

- I. They are products of volcanic activity.
  - II. They derive from a planet larger than Earth.
  - III. They come from a planetary body with a chemical composition similar to that of  $I_0$ .
- A.** I only
  - B.** II only
  - C.** I and II only
  - D.** II and III only
  - E.** I, II and III

**10. According to the passage, a meteorite discovered on Earth is unlikely to have come from a large planet for which of the following reasons?**

- A.** There are fewer large planets in the solar system than there are asteroids.
- B.** Most large planets have been volcanically inactive for more than a billion years.
- C.** The gravitational pull of a large planet would probably prohibit fragments from escaping its orbit.
- D.** There are no chondrites occurring naturally on Earth and probably none on other large planets.
- E.** Interbody impact is much rarer on large than on small planets because of the density of the atmosphere on large planets.

**11. The passage suggests that the age of shergottites is probably**

- A. still entirely undetermined
- B. less than that of most other achondrites
- C. about 3.5 billion years
- D. the same as that of typical achondrites
- E. greater than that of the Earth

**12. According to the passage, the presence of chondrules in a meteorite indicates that the meteorite**

- A. has probably come from Mars
- B. is older than the solar system itself
- C. has not been melted since the solar system formed
- D. is certainly less than 4 billion years old
- E. is a small fragment of an asteroid

**13. 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?

**14. 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 EXCEPT the**

- A. planet's size
- B. planet's distance from Earth
- C. strength of the planet's field of gravity
- D. proximity of the planet to its moons
- E. chemical composition of the planet's surface

**15. It can be inferred from the passage that most meteorites found on Earth contain which of the following?**

- A. Crystals
- B. Chondrules
- C. Metals
- D. Sodium
- E. Sulfur

#### **Passage 4**

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. By splitting an event into fragments and recording each from the most suitable camera position, he could significantly vary the emphasis from camera shot to camera shot.

Griffith also achieved dramatic effects by means of creative editing. By juxtaposing images and varying the speed and rhythm of their presentation, he could control the dramatic intensity of the events as the story progressed. Despite the reluctance of his producers, who feared that the public would not be able to follow a plot that was made up of such juxtaposed images, Griffith persisted, and experimented as well with other elements of cinematic syntax that have become standard ever since. These included the flashback, 'permitting broad psychological and emotional exploration as well as narrative that was not chronological, and the crosscut between two parallel actions to heighten suspense and excitement. In thus exploiting fully the possibilities of editing, Griffith transposed devices of the Victorian novel to film and gave film mastery of time as well as space.

Besides developing the cinema's language, Griffith immensely broadened its range and treatment of subjects. His early output was remarkably eclectic: it included not only the standard comedies, melodramas, westerns, and thrillers, but also such novelties as adaptations from Browning and Tennyson, and treatments of social issues. As his successes mounted, his ambitions grew, and with them the whole of American cinema. When he remade *Enoch Arden* in 1911, he insisted that a subject of such importance could not be treated in the then conventional length of one reel. Griffith's introduction of the American-made multi reel picture began an immense revolution. Two years later, *Judith of Bethulia*, an elaborate historic philosophical spectacle, reached the unprecedented length of four reels, or one hour's running time. From our contemporary viewpoint, the pretensions of this film may seem a trifle ludicrous, but at the time it provoked endless debate and discussion and gave a new intellectual respectability to the cinema.

#### **16. The primary purpose of the passage is to**

- A.** discuss the importance of Griffith to the development of the cinema
- B.** describe the impact on cinema of the flashback and other editing innovations
- C.** deplore the state of American cinema before the advent of Griffith.
- D.** analyze the changes in the cinema wrought by the introduction of the multi reel film
- E.** document Griffith's impact on the choice of subject matter in American films

**17. The author suggests that Griffith's film innovations had a direct effect on all of the following EXCEPT**

- A. film editing
- B. camera work
- C. scene composing
- D. sound editing
- E. directing

**18. It can be inferred from the passage that before 1910 the normal running time of a film was**

- A. 15 minutes or less
- B. between 15 and 30 minutes
- C. between 30 and 45 minutes
- D. between 45 minutes and 1 hour
- E. 1 hour or more

**19. The author asserts that Griffith introduced all of the following into American cinema EXCEPT**

- A. consideration of social issues
- B. adaptations from Tennyson
- C. the flashback and other editing techniques
- D. photographic approaches inspired by Victorian painting
- E. dramatic plots suggested by Victorian theater

**20. The author suggests that Griffith's contributions to the cinema had which of the following results?**

- I. Literary works, especially Victorian novels, became popular sources for film subjects.
  - II. Audience appreciation of other film directors' experimentations with cinematic syntax was increased.
  - III. Many of the artistic limitations thought to be inherent in filmmaking were shown to be really nonexistent.
- A. II only
  - B. III only
  - C. I and II only
  - D. II and III only
  - E. I, II, and III

**21. It can be inferred from the passage that Griffith would be most likely to agree with which of the following statements?**

- A. The good director will attempt to explore new ideas as quickly as possible.
- B. The most important element contributing to a film's success is the ability of the actors.
- C. The camera must be considered an integral and active element in the creation of film.
- D. The cinema should emphasize serious and sober examinations of fundamental human problems.
- E. The proper composition of scenes in a film is more important than the details of their editing.



**22. 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

**Passage 5**

Throughout human history there have been many stringent taboos concerning watching other people eat or eating in the presence of others. There have been attempts to explain these taboos in terms of 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 pre-historic 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. Further, during those times, people existed in nuclear or extended family groups, and the sharing of food was quite literally supporting one's family or, by extension, preserving one's self.

**23. 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**

- A. had always had a plentiful supply of food
- B. emphasize 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

**24. 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

**25. According to the passage, the author believes that past attempts to explain some taboos concerning eating are**

- A. unimaginative
- B. implausible
- C. inelegant
- D. incomplete
- E. unclear

**26. In developing the main idea of the passage, the author does which of the following?**

- A.** Downplays earlier attempts to explain the origins of a social prohibition
- B.** Adapts a scientific theory and applies it to a spiritual relationship.
- C.** Simplifies a complex biological phenomenon by explaining it in terms of social needs.
- D.** Reorganizes a system designed to guide personal behavior.
- E.** Codifies earlier, un systematized conjectures about family life.

(This passage is from a book published in 1975.)

**Passage 6**

That Louise Nevelson is believed by many critics to be the greatest twentieth-century sculptor is all the more remarkable because the greatest resistance to women artists has been, until recently, in the field of sculpture. Since Neolithic times, sculpture has been considered the prerogative of men, partly, perhaps, for purely physical reasons: it was erroneously assumed that women were not suited for the hard manual labor required in sculpting stone, carving wood, or working in metal. It has been only during the twentieth century that women sculptors have been recognized as major artists, and it has been in the United States, especially since the decades of the fifties and sixties, that women sculptors have shown the greatest originality and creative power. Their rise to prominence parallels the development of sculpture itself in the United States: while there had been a few talented sculptors in the United States before the 1940's, it was only after 1945-when New York was rapidly becoming the art capital of the world-that major sculpture was produced in the United States. Some of the best was the work of women.

By far the most outstanding of these women 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."

Her works have been compared to the Cubist constructions of Picasso, the Surrealistic objects of Miro, and the Merzbau of Schwitters. Nevelson would be the first to admit that she has been influenced by all of these, as well as by African sculpture, and by Native American and pre-Columbian art, but she has absorbed all these influences and still created a distinctive art that expresses the urban landscape and the aesthetic sensibility of the twentieth century, 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 in 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 such connotations. In some ways, her most

ambitious works are closer to architecture than to traditional sculpture, but then neither Louise Nevelson nor her art fits into any neat category.

**27. The passage focuses primarily on which of the following?**

- A. A general tendency in twentieth-century art
- B. The work of a particular artist
- C. The artistic influences on women sculptors
- D. Critical responses to twentieth-century sculpture
- E. Materials used by twentieth-century sculptors

**28. Which of the following statements is supported by information given in the passage?**

- A. Since 1945 women sculptors in the United States have produced more sculpture than have men sculptors.
- B. Since 1950 sculpture produced in the United States has been the most original and creative sculpture produced anywhere.
- C. From 1900 to 1950 women sculptors in Europe enjoyed more recognition for their work than did women sculptors in the United States.
- D. Prior to 1945 there were many women sculptors whose work was ignored by critics.
- E. Prior to 1945 there was little major sculpture produced by men or women sculptors working in the United States.

**29. The author quotes Hilton Kramer in lines 25-27 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

**30. Which of the following is one way in which Nevelson's art illustrates her theory as it is expressed in lines 36-38 ?**

- 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 sculpture.

**31. It can be inferred from the passage that the author believes which of the following about Nevelson's sculptures?**

- A. They suggest religious and symbolic meanings.
- B. They do not have qualities characteristic of sculpture.
- C. They are mysterious and awe-inspiring, but not beautiful.
- D. They are uniquely American in style and sensibility.
- E. They show the influence of twentieth-century architecture.

**32. The author regards Nevelson's stature in the art world as "remarkable" (line 3) in part because of which of the following?**

- A. Her work is currently overrated.
- B. Women sculptors have found it especially difficult to be accepted and recognized as major artists.
- C. Nevelson's sculptures are difficult to understand.
- D. Many art critics have favored painting over sculpture in writing about development in the art world.
- E. Few of the artists prominent in the twentieth century have been sculptors.

**33. Which of the following statements about Nevelson's sculptures can be inferred from the passage?**

- A. They are meant for display outdoors.
- B. They are often painted in several colors.
- C. They are sometimes very large.
- D. They are hand carved by Nevelson.
- E. They are built around a central wooden object.

### **Passage 7**

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

**34. Which of the following is a fact presented in the passage?**

- A. The shape of the connections between the separate, sack like masses in pillow lava is unknown.
- B. More accurate cross sections of pillow lava would reveal the mode of origin.
- C. Water or ice is necessary for the formation of pillow lava.
- D. No three-dimensional examples of intact pillows currently exist.
- E. The origin of pillow lava is not, yet known.

**35. In the passage, the author is primarily interested in**

- 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

**36. The author of the passage would most probably agree that the geologists mentioned in line 6 ("Some geologists") have made which of the following errors in reasoning?**

- I. Generalized unjustifiably from available evidence.
  - II. Deliberately ignored existing counterevidence.
  - III. Repeatedly failed to take new evidence into account.
- A. I only
  - B. II only
  - C. III only
  - D. I and II only
  - E. II and III only

**37. The author implies that the "controversy" (line 9) might be resolved if**

- 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

### **Passage 8**

If a supernova (the explosion of a massive star) triggered 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 distribution 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 into stars that form a spiral pattern.

**38. 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

**39. 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

**40. 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.
- C. The most massive stars formed from supernovas explosions are unlikely to evolve into supernovas.
- 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.

**41. The author's attitude toward the new theory of spiral-galaxy structure can best be described as**

- A. euphoric
- B. enthusiastic
- C. concerned
- D. critical
- E. disputatious

### **Passage 9**

The first mention of slavery in the statutes of the English colonies of North America does not occur until after 1660--some forty years after the importation of the first Black people. Lest we think that slavery existed in fact before it did in law. Oscar and Mary Handlin assure us that the status of Black people down to the 1660's was that of servants. A critique of the Handlin's interpretation of why legal slavery did not appear until the 1660's suggests that assumptions about the relation between slavery and racial prejudice should be reexamined and that explanations for the different treatment of Black slaves in North and South America should be expanded.

The Handlin's explain the appearance of legal slavery by arguing that, during the 1660's, the position of White servants was improving relative to that of Black servants. Thus, the Handlin's contend, Black and White servants, heretofore; treated alike, each attained a different status. There are, however, important objections to this argument. First, the Handlin's cannot adequately demonstrate that the White servant's position was improving during and after the 1660s; several acts of the Maryland and Virginia legislatures indicate otherwise. Another flaw in the Handlin's interpretation is their assumption that prior to the establishment of legal slavery there was no discrimination against Black people. It is true that before the 1660's

Black people were rarely called slaves. But this should not overshadow evidence from the 1630's on that points to racial discrimination without using the term slavery. Such discrimination sometimes stopped short of lifetime servitude or inherited status--the two attributes of true slavery--yet in other cases it included both. The Handlin's argument excludes the real possibility that Black people in the English colonies were never treated as the equals of White people.

This possibility has important ramifications. If from the outset Black people were discriminated against, then legal slavery should be viewed as a reflection and an extension of racial prejudice rather than, as many historians including the Handlins 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.

**42. Which of the following statements best describes the organization of lines 1-8 of the passage?**

- A. A historical trend is sketched and an exception to that trend is cited.
- B. Evidence for a historical irregularity is mentioned and a generalization from that evidence is advanced.
- C. A paradox about the origins of an institution is pointed out and the author's explanation of the paradox is expounded.
- D. A statement about a historical phenomenon is offered and a possible misinterpretation of that statement is addressed.
- E. An interpretation of the rise of an Institution is stated and evidence for that interpretation is provided.

**43. Which of the following is the most logical inference to be drawn from the passage about the effects of "several acts of the Maryland and Virginia legislatures" (lines 22-23) passed during and after the 1660's?**

- A. The acts negatively affected the pre-1660's position of Black as well as of White servants.
- B. The acts had the effect of impairing rather than improving the position of White servants relative to what it had been before the 1660's.
- C. The acts had a different effect on the position of White servants than did many of the acts passed during this time by the legislatures of other colonies.
- D. The acts, at the very least, caused the position of White servants to remain no better than it had been before the 1660's.
- E. The acts, at the very least, tended to reflect the attitudes toward Black servants that already existed before the 1660's.

- 44. With which of the following statements regarding the status of Black people in the English colonies of North America before the 1660's would the author be LEAST likely to agree?**
- A. Although Black people were not legally considered to be slaves, they were often called slaves.
  - B. Although subject to some discrimination, Black people had a higher legal status than they did after the 1660's.
  - C. Although sometimes subject to lifetime servitude, Black people were not legally considered to be slaves.
  - D. Although often not treated the same as White people, Black people, like many white people, possessed the legal status of servants.
  - E. Although apparently subject to more discrimination after 1630 than before 1630, Black people from 1620 to the 1660's were legally considered to be servants.
- 45. According to the passage, the Handlin's have 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. Racial prejudice most often took the form of the imposition of inherited status, one of the attributes of slavery.
  - C. The source of racial prejudice was the institution of slavery.
  - D. Because of the influence of the Roman Catholic church, racial prejudice sometimes did not result in slavery.
  - E. Although existing in a lesser form before the 1660's, racial prejudice increased sharply after slavery was legalized.
- 46. 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 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
- 47. 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
- 48. With which of the following statements regarding the reason for the introduction of legal slavery in the English colonies of North America would the author be most likely to agree?**
- A. The introduction is partly to be explained by reference to the origins of slavery, before the 1660's, in the Spanish and Portuguese colonies.



- B. The introduction is to be explained by reference to a growing consensus beginning in the 1630's about what were the attributes of true slavery.
- C. The introduction is more likely to be explained by reference to a decline than to an improvement in the position of White servants in the colonies during and after the 1660's.
- D. The introduction is more likely to be explained by reference to the position of Black servants in the colonies in the 1630's than by reference to their position in the 1640's and 1650's.
- E. The introduction is more likely to be explained by reference to the history of Black people in the colonies before 1660 than by reference to the improving position of white servants during and after the 1660's.

**Directions :** Each passage in this group is followed by questions based on its content. After reading a passage, choose the best answer to each question. Answer all questions following a passage on the basis of what is stated or implied in that passage.

**Passage 10**

The belief that art originates in intuitive rather than rational faculties was worked out historically and philosophically in the somewhat wearisome volumes of Benedetto Croce, who is usually considered the originator of a new aesthetic. Croce was, in fact, expressing a very 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 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 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.

- 49. 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?**
- A. The craftsmanship that shaped Gothic 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 artistic creation.
  - E. The assumptions of aesthetic philosophers before Croce would have been invalidated.

**50. The passage supplies information for answering which of the following questions?**

- A. Does Romantic art exhibit the triumph of intuition over intellect?
- B. Did an emphasis on' linear perspective and anatomy dominate Romantic art?
- C. Are the intellectual and intuitive faculties harmoniously balanced in post-Romantic art?
- D. Are the effects of the rational control of artistic inspiration evident in the great works of pre-Romantic eras?
- E. Was the artistic craftsmanship displayed in Gothic cathedrals also an element in paintings of this period?

**51. The passage implies that which of the following was a traditional assumption of aesthetic philosophers?**

- A. Intellectual elements in art exert a necessary control over artistic inspiration.
- B. Architecture has never again reached the artistic greatness of the Gothic cathedrals.
- C. Aesthetic philosophy is determined by the technical necessities of art.
- D. Artistic craftsmanship is more important in architectural art than in pictorial art.
- E. Paintings lacked the intellectual element before the invention of linear perspective and anatomy.

**52. 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