

CODE 4
READING PAPER
Time permitted: 60 minutes
Number of questions: 40

Directions: In this section you will read *FOUR* different passages. Each one is followed by 10 questions about it. For questions 1-40, you are to choose the best answer A, B, C or, to each question. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen. Answer all questions following a passage on the basis of what is stated or implied in that passage.

You have 60 minutes to answer all the questions, including the time to transfer your answers to the answer sheet.

PASSAGE 1 – Questions 1-10

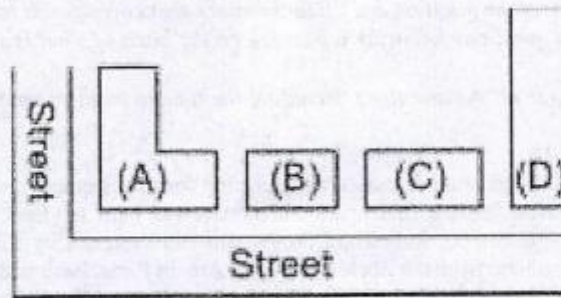
In the last third of the nineteenth century a new housing form was quietly being developed. In 1869 the Stuyvesant, considered New York's first apartment house was built on East Eighteenth Street. The building was financed by the developer Rutherford Stuyvesant and designed by Richard Morris Hunt, the first American architect to graduate from the Ecole des Beaux Arts in Paris. Each man had lived in Paris, and each understood the economics and social potential of this Parisian housing form. But the Stuyvesant was at best a limited success. In spite of Hunt's **inviting** facade, the living space was awkwardly arranged. Those who could afford them were quite content to remain in the more **sumptuous**, single-family homes, leaving the Stuyvesant to young married couples and bachelors.

The fundamental problem with the Stuyvesant and the other early apartment buildings that quickly followed, in the 1870's and early 1880's was that they were confined to the typical New York building lot. That lot was a rectangular area 25 feet wide by 100 feet deep - a shape perfectly suited for a row house. The lot could also accommodate a rectangular tenement, though it could not **yield** the square, well-lighted, and logically arranged rooms that great apartment buildings require. But even with the awkward interior configurations of the early apartment buildings, the idea caught on. It met the needs of a large and growing population that wanted something better than tenements but could not afford or did not want row houses.

So while the city's newly emerging social leadership commissioned their mansions, apartment houses and hotels began to sprout in multiple lots, thus breaking the initial space constraints. In the closing decades of the nineteenth century, large apartment houses began dotting the developed portions of New York City, and by the opening decades of the twentieth century, spacious buildings, such as the Dakota and the Ansonia finally transcended the tight confinement of row house building lots. From there it was only a small step to building luxury apartment houses on the newly created Park Avenue, right next to the fashionable Fifth Avenue shopping area.

1. The new housing form discussed in the passage refers to
 - A. single-family homes
 - B. apartment buildings
 - C. row houses
 - D. hotels
2. The word "inviting" in paragraph 1 is closest in meaning to
 - A. open
 - B. encouraging
 - C. attractive
 - D. asking
3. Why was the Stuyvesant a limited success?
 - A. The arrangement of the rooms was not convenient.
 - B. Most people could not afford to live there.
 - C. There were no shopping areas nearby.
 - D. It was in a crowded neighborhood.
4. The word "sumptuous" in paragraph 1 is closest in meaning to
 - A. luxurious
 - B. unique
 - C. modern
 - D. distant

5. It can be inferred that the majority of people who lived in New York's first apartments were
- highly educated
 - unemployed
 - wealthy
 - young
6. It can be inferred that the typical New York building lot of the 1870's and 1880's looked MOST like which of the following?



- -
 -
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7. It can be inferred that a New York apartment building in the 1870's and 1880's had all of the following characteristics EXCEPT:
- Its room arrangement was not logical.
 - It was rectangular.
 - It was spacious inside.
 - It had limited light.
8. The word "yield" in paragraph 2 is closest in meaning to
- harvest
 - surrender
 - amount
 - provide
9. Why did the idea of living in an apartment become popular in the late 1800's?
- Large families needed housing with sufficient space.
 - Apartments were preferable to tenements and cheaper than row houses
 - The city officials of New York wanted housing that was centrally located.
 - The shape of early apartments could accommodate a variety of interior designs.
10. The author mentions the Dakota and the Ansonia in line 24 because
- they are examples of large, well designed apartment buildings
 - their design is similar to that of row houses
 - they were built on a single building lot
 - they are famous hotels

PASSAGE 2 – Questions 11-20

A snowfall consists of myriads of **minute** ice crystals that fall to the ground in the form of frozen precipitation. The formation of snow begins with these ice crystals in the subfreezing strata of the middle and upper atmosphere when there is an adequate supply of moisture present. At the core of every ice crystal is a minuscule nucleus, a solid particle of matter around which moisture condenses and freezes. Liquid water droplets floating in the supercooled atmosphere and free ice crystals cannot coexist within the same cloud, since the vapor pressure of ice is less than that of water. This enables the ice crystals to rob the liquid droplets of their moisture and grow continuously. The process can be very rapid, quickly creating sizable ice crystals, some of which **adhere** to each other to create a cluster of ice crystals or a snowflake. Simple flakes possess a variety of beautiful forms, usually hexagonal, though the symmetrical shapes reproduced in most microscope photography of snowflakes are not usually found in actual snowfalls. Typically, snowflakes in actual snowfall consists of broken fragments and clusters of all the foregoing crystals.

For a snowfall to continue once it starts, there must be a constant inflow of moisture to supply the nuclei. This moisture is supplied by the passage of an airstream over a water surface and its subsequent lifting to higher regions of the atmosphere. The Pacific Ocean is the source of moisture for most snowfalls west of the Rocky Mountains, while the Gulf of Mexico and the Atlantic Ocean feed water vapor into the air currents over the central and eastern sections of the United States. Other geographical features also can be the source of moisture for some snowstorms. For example, areas adjacent to the Great Lakes experience their own unique lake-effect storms, employing a variation of the process on a local scale. In addition, mountainous section or rising terrain can **initiate** snowfalls by the geographical lifting of a moist airstream.

11. Which of the following questions does the author answer in the first paragraph?

- A. Why are snowflakes hexagonal?
- B. What is the optimum temperature for snow?
- C. In which months does most snow fall?
- D. How are snowflakes formed?

12. The word "minute" in paragraph 1 is closest in meaning to

- A. tiny
- B. quick
- C. clear
- D. sharp

13. What is at the center of an ice crystal?

- A. a small snowflake
- B. a nucleus
- C. a drop of water
- D. a hexagon

14. The word "adhere" in paragraph 1 is closest in meaning to

- A. belong
- B. relate
- C. stick
- D. speed

15. What is the main topic of the second paragraph?

- A. How ice crystals form
- B. How moisture affects temperature
- C. What happens when ice crystals melt
- D. Where the moisture to supply the nuclei comes from

16. The word "it" in paragraph 2 refers to

- A. snowfall
- B. snowflake
- C. cluster
- D. moisture

17. What is necessary for a snowfall to persist?

- A. A decrease in the number of snowflakes
- B. Lowered vapor pressure in ice crystals
- C. A continuous infusion of moisture
- D. A change in the direction of the airstream

18. How do lake-effect snowstorms form?

- A. Water temperature drop below freezing.
- B. Moisture rises from a lake into the airstream.
- C. Large quantities of wet air come off a nearby mountain.
- D. Millions of ice crystals form on the surface of a large lake.

19. The word "initiate" in line 22 is closest in meaning to

- A. enhance
- B. alter
- C. increase
- D. begin

20. Which of the following could account for the lack of snowfall in a geographical location close to mountains and a major water source?

- A. Ground temperatures below the freezing point
- B. Too much moisture in the air
- C. Too much wind off the mountains
- D. Atmospheric temperatures above the freezing point.

PASSAGE 3 – Questions 21-30

Social parasitism involves one species relying on another to **raise** its young. Among vertebrates, the best known social parasites are such birds as cuckoos and cowbirds; the female lays an egg in a nest belonging to another species and leaves it for the host to rear.

The dulotic species of ants, however, are the supreme social parasites. Consider, for example, the unusual behavior of ants belonging to the genus *Polyergus*. All species of this ant have lost the ability to care for themselves. The workers do not forage for food, feed their brood or queen, or even dean their own nest. To compensate for these deficits, *Polyergus* has become specialized at obtaining workers from the related genus *Formica* to do these chores.

In a raid, several thousand *Polyergus* workers will travel up to 500 feet in search of a *Formica* nest, penetrate it, drive off the queen and tier workers, capture the pupal brood, and transport it back to their nest. The captured brood is then reared by the resident *Formica* workers until the developing pupae emerge to add to the *Formica* population, which maintains the mixed-species nest. The *Formica* workers forage for food and give it to colony members of both species. They also remove wastes and **excavate** new chambers as the population increases.

The true extent of the *Polyergus* ants' dependence on the *Formica* becomes apparent when the worker population grows too large for the existing nest. *Formica* scouts locate a new nesting site, return to the mixed-species colony, and **recruit** additional *Formica* nest mates. During a period that may last seven days, the *Formica* workers carry to the new nest all the *Polyergus* eggs, larvae, and pupae, every *Polyergus* adult, and even the *Polyergus* queen.

Of the approximately 8,000 species of ants in the world, all 5 species of *Polyergus* and some 200 species in other genera have evolved some degree of parasitic relationship with other ants.

21. Which of the following statements best represents the main idea of the passage?

- A. Ants belonging to the genus *Formica* are incapable of performing certain tasks.
- B. The genus *Polyergus* is quite similar to the genus *Formica*.
- C. Ants belonging to the genus *Polyergus* have an unusual relationship with ants belonging to the genus *Formica*.
- D. *Polyergus* ants frequently leave their nests to build new colonies.

22. The word "raise" in paragraph 1 is closest in meaning to

- A. rear
- B. lift
- C. collect
- D. increase

23. The author mentions cuckoos and cowbirds in paragraph 1 because they

- A. share their nests with each other
- B. are closely related species
- C. raise the young of other birds
- D. are social parasites

24. The word "it" in paragraph 1 refers to

- A. species
- B. nest
- C. egg
- D. female

25. What does the author mean by stating that "The dulotic species of lifts... are die supreme social parasites" (paragraph 1)?

- A. The *Polyergus* are more highly developed than die *Formica*.
- B. The *Formica* have developed specialized roles.
- C. The *Polyergus* are heavily dependent on the *Formica*.
- D. The *Formica* do not reproduce rapidly enough to care for themselves.

26. Which of the following is a task that an ant of the genus *Polyergus* might do?
- A. Look for food.
 - B. Raid another nest
 - C. Care for the young.
 - D. Clean its own nest.
27. The word "excavate" in paragraph 3 is closest in meaning to
- A. find
 - B. clean
 - C. repair
 - D. dig
28. The word "recruit" in paragraph 4 is closest in meaning
- A. create
 - B. enlist
 - C. endure
 - D. capture
29. What happens when a mixed colony of *Polyergus* and *Formica* ants becomes too large?
- A. The *Polyergus* workers enlarge the existing nest.
 - B. The captured *Formica* workers return to their original nest.
 - C. The *Polyergus* and the *Formica* build separate nests.
 - D. The *Polyergus* and the *Formica* move to a new nest.
30. According to the information in the passage, all of the following terms refer to ants belonging to the genus *Formica* EXCEPT the
- A. dulotic species of ants
 - B. captured brood
 - C. developing pupae
 - D. worker population

PASSAGE 4 – Questions 31-40

The Winterthur Museum is a collection and a house. There are many museums devoted to the decorative arts and many house museums, but rarely in the United States is a great collection displayed in a great country house. Passing through successive generations of a single family, Winterthur has been a private estate for more than a century. Even after the extensive renovations made to it between 1929 and 1931, the house remained a family residence. This fact is of importance to the atmosphere and effect of the museum. *The impression of a lived-in house is apparent to the visitor*; the rooms look as if they were vacated only a short while ago whether by the original owners of the furniture or the most recent residents of the house can be a matter of personal interpretation. Winterthur remains, then, a house in which a collection of furniture and architectural elements has been **assembled**. Like an English country house, it is an organic structure; the house, as well as the collection and manner of displaying it to the visitor, has changed over the years. The changes have coincided with **developing** concepts of the American arts, increased knowledge on the part of collectors and students, and a progression toward the achievement of a historical effect in period-room displays. The rooms at Winterthur have followed this current, yet still retained the character of a private house.

The concept of a period room as a display technique has developed gradually over the years in an effort to present works of art in a context that would show them to greater effect and would give them more meaning for the viewer. Comparable to the habitat group in a natural history museum, the period room represents the decorative arts in a lively and interesting manner and provides an opportunity to assemble objects related by style, date, or place of manufacture.

31. What does the passage mainly discuss?
- A. The reason that Winterthur was redesigned
 - B. Elements that make Winterthur an unusual museum
 - C. How Winterthur compares to English country houses
 - D. Historical furniture contained in Winterthur

32. The phrase "devoted to" in paragraph 1 is closest in meaning to
- A. surrounded by
 - B. specializing in
 - C. successful with
 - D. sentimental about
33. What happened at Winterthur between 1929 and 1931?
- A. The owners moved out.
 - B. The house was repaired.
 - C. The old furniture was replaced.
 - D. The estate became a museum.
34. What does the author mean by stating "The impression of a lived-in house is apparent to the visitor" (paragraph 1)?
- A. Winterthur is very old.
 - B. Few people visit Winterthur.
 - C. Winterthur does not look like a typical museum.
 - D. The furniture at Winterthur looks comfortable.
35. The word "assembled" in paragraph 1 is closest in meaning to
- A. summoned
 - B. appreciated
 - C. brought together
 - D. fundamentally changed
36. The word "it" in paragraph 1 refers to
- A. Winterthur
 - B. collection
 - C. English country house
 - D. visitor
37. The word "developing" in paragraph 1 is closest in meaning to
- A. traditional
 - B. exhibiting
 - C. informative
 - D. evolving
38. According to the passage, objects in a period room are related by all of the following EXCEPT
- A. date
 - B. style
 - C. place of manufacture
 - D. past ownership
39. What is the relationship between the two paragraphs in the passage?
- A. The second paragraph explains a term that was mentioned in the first paragraph.
 - B. Each paragraph describes a different approach to the display of objects in a museum.
 - C. The second paragraph explains a philosophy of art appreciation that contrasts with the philosophy explained in the first paragraph.
 - D. Each paragraph describes a different historical period.
40. Where in the passage does the author explain why displays at Winterthur have changed?
- A. lines 1-3
 - B. lines 4-6
 - C. lines 7-9
 - D. lines 12-15