

# ***TOEFL***®

Test of English as a Foreign Language

**(A Full Set of Questions and An Answer Key)**

## Listening Comprehension

1. (A) He can have more than four guests at his graduation.  
(B) His brother isn't going to graduate this semester.  
(C) He didn't know that Jane wanted to be invited.  
(D) He's going to invite Jane.
2. (A) Listen to the traffic report on the radio  
(B) Take a later train.  
(C) Run to catch the next train.  
(D) Check the weekend schedule.
3. (A) Deliver the notebook to Kathy.  
(B) Find out where Kathy put the notebook.  
(C) Ask Kathy to explain the chemistry notes.  
(D) Ask Kathy for the man's notebook.
4. (A) The walk is shorter than the woman thinks it is.  
(B) The lecture has already started.  
(C) They won't have a problem getting seats.  
(D) The lecture may be canceled.
5. (A) The woman should have studied French in Paris.  
(B) He didn't study French in high school.  
(C) Living in Paris helped improve the woman's language skills.  
(D) The woman must have had a good French teacher.
6. (A) Apologize to his roommate.  
(B) Give the notes to the woman.  
(C) Call the woman tonight.  
(D) Take the woman's notes to his roommate.
7. (A) She doesn't have time to talk to Dr. Foster.  
(B) She needs the additional time to finish her paper.  
(C) Dr. Foster hasn't finished grading the papers.  
(D) She wants the man to help her with her paper.
8. (A) Phone the Cliffside Inn for a reservation.  
(B) Ask her parents to come a different weekend.  
(C) Call local hotels again in a few days.  
(D) Find a hotel again in a few days.
9. (A) Mail her some information about the conference.  
(B) Drive her to the conference.  
(C) Attend the conference in her place.  
(D) Collect her mail while she's at the conference.
10. (A) The man should stop by the bookstore on the way to class.  
(B) The man can return the books he doesn't need.  
(C) The man should have bought his books earlier.  
(D) The man won't need books on the first day of class.
11. (A) Help the man with his essay.  
(B) Ask Sue to rehearse with her.  
(C) Wait to rehearse until the man has finished his essay.  
(D) Memorize her lines by herself.
12. (A) Show her the newspaper that he's talking about.  
(B) Think about getting an internship at another place.  
(C) Sign up for more than one journalism class.  
(D) Call The Times about the internship.

13. (A) He isn't as good a tennis player as he used to be.  
(B) He hasn't had time to play tennis recently.  
(C) He caught a cold shortly after the tournament.  
(D) He thinks he's more important than he is.
14. (A) He'll graduate before the woman.  
(B) He hopes to graduate before the summer.  
(C) He doesn't want to attend school year-round.  
(D) The woman won't be able to keep up the pace.
15. (A) It's too late to buy the morning newspaper.  
(B) He doesn't want to go to the concert.  
(C) The box office is closed today.  
(D) All of the tickets have been sold.
16. (A) The woman swims as well as he does.  
(B) He doesn't have time to teach the woman to swim.  
(C) He doesn't enjoy swimming.  
(D) He learned to swim at a young age.
17. (A) She has already started working on her research project.  
(B) She can't decide on a research topic.  
(C) She'd like to discuss her research with the man.  
(D) She has to change the subject of her research.
18. (A) Introduce the woman to his neighbor.  
(B) Get a key from his neighbor.  
(C) Study in his neighbor's apartment.  
(D) Borrow some books from his neighbor.
19. (A) The man shouldn't hire the same tutor that she had.  
(B) She isn't prepared for the midterm exam either.  
(C) It's too late to find a tutor.  
(D) The man should hire a tutor before the midterm exam.
20. (A) Stay in the hotel for at least two nights.  
(B) Leave the hotel the next morning.  
(C) Ask the hotel clerk for her room key.  
(D) Complain to the manager about the extra charges.
21. (A) He doesn't recommend going to Central Mountain.  
(B) He doesn't plan to go skiing during spring break.  
(C) He has never been to Central Mountain.  
(D) He isn't an experienced skier.
22. (A) She knows who the top history student is.  
(B) She hasn't read the campus newspaper today.  
(C) The man is mistaken.  
(D) It's surprising that her roommate likes history.
23. (A) He's not qualified to proofread the woman's report.  
(B) He'll be able to talk to the woman in a few minutes.  
(C) He hadn't noticed a lot of the woman's mistakes.  
(D) He thinks the woman should have asked him sooner.
24. (A) Practice her presentation in front of him.  
(B) Find out who her audience will be tomorrow.  
(C) Try not to think about her audience.  
(D) Watch him make his presentation.

25. (A) She's also curious about who won the game.  
(B) She didn't go to the game.  
(C) She was sitting right behind the man at the game.  
(D) She also left the game early.
26. (A) Make a shopping list.  
(B) Buy some groceries.  
(C) Finish making the salad.  
(D) Wait for the woman to return.
27. (A) He finds the dictionary very useful.  
(B) He knows where the woman put the dictionary.  
(C) he doesn't expect the woman to replace the dictionary.  
(D) The woman should buy her own dictionary.
28. (A) She plans to miss soccer practice.  
(B) She'll arrive at the party after soccer practice.  
(C) Soccer practice will end later than usual.  
(D) She'll go to soccer practice after the party.
29. (A) Dr. Smith told her something important.  
(B) Dr. Smith didn't understand what she said.  
(C) She wanted to protect Dr. Smith's feelings.  
(D) She didn't intend to say what she said.
30. (A) He sells paint supplies.  
(B) He plans to take an art class with the woman.  
(C) He works as an artist.  
(D) He works in an art museum.
31. (A) The cost of meals in the cafeteria.  
(B) The size of the cafeteria.  
(C) Career opportunities in cafeterias.  
(D) The food served in the cafeteria.
32. (A) Giving advice on nutrition.  
(B) Cooking food for the students.  
(C) Listening to complaints about service.  
(D) Serving food to the students.
33. (A) Find other students who will work in the cafeteria.  
(B) Collect students' opinions about meals.  
(C) As students to try a new dish he has made.  
(D) Teach students about the disadvantages of frying food.
34. (A) Stop serving hamburgers and fried chicken.  
(B) Use less sauce on the food.  
(C) Make some of the meals less fattening.  
(D) Buy less expensive food.
35. (A) Somewhat curious.  
(B) Very skeptical.  
(C) Quite irritated.  
(D) Not at all interested.
36. (A) That he'll be performing in a concert.  
(B) That he had a conversation with the director of a choir.  
(C) That he heard a new musical composition by Barbara Johnson.  
(D) That he's been translating some Latin poems for a class.

37. (A) They're members of the Latin club on campus.  
(B) They work as editors.  
(C) They attended the same concert.  
(D) Music is their major field of study.
38. (A) She was upset.  
(B) She was confused.  
(C) She was amused.  
(D) She was grateful.
39. (A) Some photographs that he took of her during the concert.  
(B) A tape recording that he made of the concert.  
(C) A review of the concert that he wrote for the campus paper.  
(D) The corrected text from the program of the concert.
40. (A) The skills cowboys learned on the range.  
(B) The evolution of rodeos.  
(C) The recent decline in the popularity of rodeos.  
(D) The growth of the cattle industry.
41. (A) They were small informal events.  
(B) Competitors were awarded large prizes.  
(C) Large audiences attended them.  
(D) There were standard rules for judging events.
42. (A) It is the only traveling rodeo.  
(B) it is the largest agricultural fair.  
(C) It is the oldest annual rodeo.  
(D) It was the first rodeo to charge admission.
43. (A) How animals react to frightening situations.  
(B) Why mice are particularly fearful animals.  
(C) Whether fearfulness is a genetic trait.  
(D) Why certain animals are feared by humans.
44. (A) They fought with the other mice.  
(B) They stayed close to their mothers.  
(C) They ran back and forth constantly.  
(D) They remained close to one wall.
45. (A) The extent of damage to the nervous system.  
(B) The presence or absence of certain nerve-cell receptors.  
(C) The size of nerve-cell receptors in the brain.  
(D) The level of danger in the mammal's environment.
46. (A) To show the relationship between fearfulness and environment.  
(B) To give examples of animals that aren't fearful.  
(C) To compare fear in mammals to fear in other animals.  
(D) To identify the nerves that control fear in certain animals.
47. (A) Why water flows from artesian springs.  
(B) How artesian wells are drilled.  
(C) Why artesian springs are important to geologic research.  
(D) How aquifers are formed.
48. (A) They pump water from the aquifer.  
(B) They purify the water in the aquifer.  
(C) They store excess water from the aquifer.  
(D) They trap water in the aquifer.

49. (A) By eroding layers of sediment above it.  
 (B) By traveling through cracks in layers of rock.  
 (C) By reversing its flow down the aquicludes.  
 (D) By boiling up through pores in the aquifer.
50. (A) It pushes the water upward.  
 (B) It keeps the water cool.  
 (C) It holds the water underground.  
 (D) It creates holes in the aquiclude.

### Structure and Written Expression

- A three-foot octopus can crawl through a hole ----- in diameter.  
 (A) than one inch less  
 (B) less than one inch  
 (C) one less inch than  
 (D) than less one inch
- adopted the decimal system of coinage in 1867.  
 (A) Canada  
 (B) When Canada  
 (C) Canada, which  
 (D) There was Canada
- Generally, the representatives ----- a legislature are constitutionally elected by a broad spectrum of the population.  
 (A) who they compose  
 (B) who compose  
 (C) had compose  
 (D) compose
- The Actor's Studio, a professional actors' workshop in New York City, provides -----where actors can work together without the pressure of commercial production.  
 (A) a place and  
 (B) a place  
 (C) so that a place  
 (D) a place is
- that life began billions of years ago in the water.  
 (A) It is believed  
 (B) In the belief  
 (C) The belief  
 (D) Believing
- By 1872 the United States had 70 engineering colleges, ----- astonishing expansion credited largely to the Morrill Act of 1862.  
 (A) because  
 (B) an  
 (C) to which  
 (D) was
- The artist Romare Bearden was ----- whose yellows, deep blues, and fuchsias contrasted strongly with photographic gray in his bright collages.  
 (A) with a gift for color  
 (B) a gifted colorist  
 (C) a gift with colorful  
 (D) gifted with coloring
- The most important chemical catalyst on this planet is chlorophyll, -----carbon dioxide and water react to form carbohydrates.

- (A) whose presence
- (B) which is present
- (C) presenting
- (D) in the presence of which

9. One theory of the origin of the universe is-----from the explosion of a tiny, extremely dense fireball several billion years ago.

- (A) because what formed
- (B) the formation that
- (C) that it formed
- (D) when forming

10. Roads in the United States remained crude,----- with graded or wood planks, until the beginning of the twentieth century.

- (A) were unsurfaced or they covered them
- (B) which unsurface or covered
- (C) unsurfaced or covered them
- (D) unsurfaced or covered

11. Portrait prints were the first reproductions of American paintings ----- widely distributed in the United States.

- (A) were
- (B) that which
- (C) that being
- (D) to be

12. Abigail Adams was prodigious letter writer, ----- many editions of her letters have been published.

- (A) who
- (B) and
- (C) in addition to
- (D) due to

13. In geometry, an ellipse may be defined as the locus of all points -----distances from two fixed points is constant.

- (A) which as the sum of
- (B) of the sum which
- (C) whose sum of whose
- (D) whose sum that the

14. -----at the site of a fort established by the Northwest Mounted Police, Calgary is now one of Canada's fastest growing cities.

- (A) Built
- (B) It is built
- (C) To build
- (D) Having built

15. An image on a national flag can symbolize political ideals that -----express.

- (A) take many words to otherwise would.
- (B) would take to many otherwise words
- (C) many words to take would otherwise
- (D) would otherwise take many words to

16. A variation of collodion photography was the tintype, which captured images on a black or dark brown metal plate instead from on glass.

A

B

C

D

17. In cases of minor injury to the brain, amnesia is likely to be a temporarily condition.

A

B

C

D

18. The system of chemical symbols, first devised about 1800 gives a concise and instantly recognizable description of a element or compound.  
A B C D
19. The fact that white light is light composed of various wavelengths may be demonstrating by dispersing a beam of such light through a prism.  
A B C D
20. Over the course of history, much civilizations developed their own number systems.  
A B C D
21. In the United States during the Second World War, each trade unions and employers avoided federal limits on wages by offering employees nontaxable medical benefits.  
A B C D
22. Philosophy is the study of the nature of reality, knowledge, existent, and ethics by means of rational inquiry.  
A B C D
23. Poems vary in length from brief lyric poems to narrative or epic poems, which can be as broad in scope than a novel.  
A B C D
24. The population of California more than doubled during the period 1940-1960, creating problems in road-building and provide water for its arid southern section.  
A B C D
25. Although based it on feudal models, the colony of Pennsylvania developed a reputation for a progressive political and social outlook.  
A B C D
26. Hard and resistant to corrosion, bronze is traditionally used in bell casting and is the material used widely most for metal sculpture.  
A B C D
27. The Appalachian Mountains formation a natural barrier between the eastern seaboard and the vast lowlands of the continental interior of North America.  
A B C D
28. The United States census for 1970 showed that the French-speaking residents of Louisiana were one of the country's most compact regional linguistic minority.  
A B C D
29. When used as food additives, antioxidants prevent fats and oils from become rancid when exposed to air, and thus extend their shelf life.  
A B C D
31. Copper was the first metallic used by humans and is second only to iron in its utility through the ages.  
A B C D
32. Despite the fact that lemurs are general nocturnal, the ring-tailed lemur travels by day in bands of four to twelve individuals.  
A B C D
33. The Western world is beset with the range of problem that characterize mature, postindustrial societies.  
A B C D
34. Acrylic paints are either applied using a knife or diluted and spreading with a paintbrush.  
A B C D
35. Some marine invertebrates, such as the sea urchin and the starfish, migrates from deep water  
A B



- to shallow during spring and early summer to spawn.  
C D
36. Marshes, wetland areas characterized by plant grassy growth, are distinguished from swamps,  
A B C  
wetlands where trees grown.  
D
37. Wampum, beads used as a form of exchange by some Native Americans, was made of bits of  
A B C  
seashells cut, drill, and strung into belts.  
C
38. Kangaroos use their long and powerful tails for balance themselves when sitting upright or  
A B C D  
jumping.
39. Proper city planning provides for the distribution of public utilities, public buildings, parks, and  
A B  
recreation centers, and for adequate and the inexpensive housing.  
C D
40. Most traditional dances are made up of a prearranged series of steps and movements, but modern  
A B  
dancers are generally free to move as they choice.  
C D

## Reading Comprehension

### Questions 1-9

- In 1972, a century after the first national park in the United States was established at Yellowstone, legislation was passed to create the National Marine Sanctuaries Program. The intent of this legislation was to provide protection to selected coastal habitats similar
- 5 To that existing for land areas designated as national parks. The designation of an areas a marine sanctuary indicates that it is a protected area, just as a national park is. People are permitted to visit and observe there, but living organisms and their environments may not be harmed or removed.
- The National Marine Sanctuaries Program is administered by the National Oceanic and Atmospheric Administration, a branch of the United States Department of Commerce.
- 10 Initially, 70 sites were proposed as candidates for sanctuary status. Two and a half decades later, only fifteen sanctuaries had been designated, with half of these established after 1978. They range in size from the very small (less than 1 square kilometer) Fagatele Bay National Marine Sanctuary in American Samoa to the Monterey Bay National Marine Sanctuary in California, extending over 15,744 square kilometers.
- 15 The National Marine Sanctuaries Program is a crucial part of new management practices in which whole communities of species, and not just individual species, are offered some degree of protection from habitat degradation and overexploitation. Only in this way can a reasonable degree of marine species diversity be maintained in a setting that also maintains the natural interrelationships that exist among these species.
- 20 Several other types of marine protected areas exist in the United States and other countries. The National Estuarine Research Reserve System, managed by the United States government, includes 23 designated and protected estuaries. Outside the United States, marine protected-area programs exist as marine parks, reserves, and preserves. Over 100 designated areas exist around the periphery of the Caribbean Sea. Others range
- 25 from the well-known Australian Great Barrier Reef Marine Park to lesser-known parks in countries such as Thailand and Indonesia, where tourism is placing growing pressures on fragile coral reef systems. As state, national, and international agencies come to recognize the importance of conserving marine biodiversity, marine protected areas, whether as sanctuaries, parks, or estuarine reserves, will play an increasingly important role in preserving that diversity.

1. What does the passage mainly discuss?  
(A) Differences among marine parks, sanctuaries, and reserves  
(B) Various marine conservation programs  
(C) International agreements on coastal protection  
(D) Similarities between land and sea protected environments
2. The word “intent” in line 3 is closest in meaning to ....  
(A) repetition  
(B) approval  
(C) goal  
(D) revision
3. The word “administered” in line 8 is closest in meaning to ....  
(A) managed  
(B) recognized  
(C) opposed  
(D) justified
4. The word “these” in line 11 refers to ....  
(A) sites  
(B) candidates  
(C) decades  
(D) sanctuaries
5. The passage mentions the Monterey Bay National Marine Sanctuary (lines 13-14) as an example of a sanctuary that ....  
(A) is not well know  
(B) covers a large area  
(C) is smaller than the Fagatele Bay National Marine Sanctuary  
(D) was not originally proposed for sanctuary status
6. According to the passage, when was the National Marine Sanctuaries Program established?  
(A) Before 1972  
(B) After 1987  
(C) One hundred years before national parks were established  
(D) One hundred years after Yellowstone National Park was established
7. According to the passage, all of the following are achievements of the National Marine Sanctuaries Program EXCEPT ....  
(A) the discovery of several new marine organisms  
(B) the preservation of connections between individual marine species  
(C) the protection of coastal habitats  
(D) the establishment of areas where the public can observe marine life
8. The word “periphery” in line 24 is closest in meaning to ....  
(A) depth  
(B) landmass  
(C) warm habitat  
(D) outer edge
9. The passage mentions which of the following as a threat to marine areas outside the United States?  
(A) Limitations in financial support  
(B) The use of marine species as food  
(C) Variability of the climate  
(D) Increases in tourism

## Questions 10-17

From their inception, most rural neighborhoods in colonial North America included at least one carpenter, joiner, sawyer, and cooper in woodworking; a weaver and a tailor for clothing production; a tanner, currier, and cordwainer (shoemaker) for fabricating leather objects; and a blacksmith for metalwork. Where stone was the local building material, a mason was sure to appear on the list of people who paid taxes. With only an apprentice as an assistant, the rural artisan provided the neighborhood with common goods from furniture to shoes to farm equipment in exchange for cash or for “goods in kind” from the customer’s field, pasture, or dairy. Sometimes artisans transformed material provided by the customer wove cloth of yam spun at the farm from the wool of the family sheep; made chairs or tables from wood cut in the customer’s own woodlot; produced shoes or leather breeches from cow, deer, or sheepskin tanned on the farm.

Like their farming neighbors, rural artisans were part of an economy seen, by one historian, as “an orchestra conducted by nature.” Some tasks could not be done in the winter, other had to be put off during harvest time, and still others waited on raw materials that were only produced seasonally. As the days grew shorter, shop hours kept pace, since few artisans could afford enough artificial light to continue work when the Sun went down. To the best of their ability, colonial artisans tried to keep their shops as efficient as possible and to regularize their schedules and methods of production for the best return on their investment in time, tools, and materials. While it is pleasant to imagine a woodworker, for example, carefully matching lumber, joining a chest together without resort to nails or glue, and applying all thought and energy to carving beautiful designs on the finished piece, the time required was not justified unless the customer was willing to pay extra for the quality—and few in rural areas were. Artisans, therefore, often found it necessary to employ as many shortcuts and economics as possible while still producing satisfactory products.

10. What aspect of rural colonial North America does the passage mainly discuss?

- (A) Farming practices
- (B) The work of artisans
- (C) The character of rural neighborhoods
- (D) Types of furniture that were popular

11. The word “inception” in line 1 is closest in meaning to ....

- (A) investigation
- (B) location
- (C) beginning
- (D) records

12. The word “fabricating” in line 3 is closest in meaning to ....

- (A) constructing
- (B) altering
- (C) selecting
- (D) demonstrating

13. It can be inferred from the passage that the use of artificial light in colonial times was ....

- (A) especially helpful to woodworkers
- (B) popular in rural areas
- (C) continuous in winter
- (D) expensive

14. Why did colonial artisans want to “regularize their schedules” (line 18)?

- (A) To enable them to produce high quality products
- (B) To enable them to duplicate an item many times
- (C) To impress their customers
- (D) To keep expenses low

15. The phrase “resort to” in line 20 is closest in meaning to ....  
(A) protecting with  
(B) moving toward  
(C) manufacturing  
(D) using
16. The word “few” in lines 23 refers to ....  
(A) woodworkers  
(B) finished pieces  
(C) customers  
(D) chests
17. It can be inferred that the artisans referred to in the passage usually produced products that were ....  
(A) simple  
(B) delicate  
(C) beautifully decorated  
(D) exceptionally long-lasting

#### Questions 18-28

Cities develop as a result of functions that they can perform. Some functions result directly from the ingenuity of the citizenry, but most functions result from the needs of the local area and of the surrounding hinterland (the region that supplies goods to the city and to which the city furnishes services and other goods). Geographers often make  
5 a distinction between the situation and the site of a city. Situation refers to the general position in relation to the surrounding region, whereas site involves physical characteristics of the specific location. Situation is normally much more important to the continuing prosperity of a city. If a city is well situated in regard to its hinterland, its development is much more likely to continue. Chicago, for example, possesses an almost  
10 unparalleled situation: it is located at the southern end of a huge lake that forces east-west transportation lines to be compressed into its vicinity, and at a meeting of significant land and water transport routes. It also overlooks what is one of the world’s finest large farming regions. These factors ensured that Chicago would become a great city regardless of the disadvantageous characteristics of the available site, such as being prone to flooding  
15 during thunderstorm activity.

Similarly, it can be argued that much of New York City’s importance stems from its early and continuing advantage of situation. Philadelphia and Boston both originated at about the same time as New York and shared New York’s location at the western end of one of the world’s most important oceanic trade routes, but only New York possesses an  
20 easy-access functional connection (the Hudson-Mohawk lowland) to the vast Midwestern hinterland. This account does not alone explain New York’s primacy, but it does include several important factors. Among the many aspects of situation that help to explain why some cities grow and others do not, original location on a navigable waterway seems particularly applicable. Of course, such characteristics as slope, drainage, power  
25 resources, river crossings, coastal shapes, and other physical characteristics help to determine city location, but such factors are normally more significant in early stages of city development than later.

18. What does the passage mainly discuss?  
(A) The development of trade routes through United States cities  
(B) Contrasts in settlement patterns in United States  
(C) Historical differences among three large United States cities  
(D) The importance of geographical situation in the growth of United States cities
19. The word “ingenuity” in line 2. is closest in meaning to ....  
(A) wealth  
(B) resourcefulness  
(C) traditions  
(D) organization

20. The passage suggests that a geographer would consider a city's soil type part of its ....  
(A) hinterland  
(B) situation  
(C) site  
(D) function
21. According to the passage, a city's situation is more important than its site in regard to the city's ....  
(A) long-term growth and prosperity  
(B) ability to protect its citizenry  
(C) possession of favorable weather conditions  
(D) need to import food supplies
22. The author mentions each of the following as an advantage of Chicago's location EXCEPT its ....  
(A) hinterland  
(B) nearness to a large lake  
(C) position in regard to transport routes  
(D) flat terrain
23. The word "characteristics" in line 14 is closest in meaning to ....  
(A) choices  
(B) attitudes  
(C) qualities  
(D) inhabitants
24. The primary purpose of paragraph 1 is to ....  
(A) summarize past research and introduce a new study  
(B) describe a historical period  
(C) emphasize the advantages of one theory over another  
(D) define a term and illustrate it with an example
25. According to the passage, Philadelphia and Boston are similar to New York City in ....  
(A) size of population  
(B) age  
(C) site  
(D) availability of rail transportation
26. The word "functional" in line 20 is closest in meaning to ....  
(A) alternate  
(B) unknown  
(C) original  
(D) usable
27. The word "it" in line 21 refers to ....  
(A) account  
(B) primacy  
(C) connection  
(D) hinterland
28. The word "significant" in line 26 is closest in meaning to ....  
(A) threatening  
(B) meaningful  
(C) obvious  
(D) available

Questions 29-40

The largest of the giant gas planets, Jupiter, with a volume 1,300 times greater than Earth's, contains more than twice the mass of all the other planets combined. It is thought to be a gaseous and fluid planet without solid surfaces. Had it been somewhat more massive, Jupiter might have attained internal temperatures as high as the ignition point for nuclear reactions, and it would have flamed as a star in its own right. Jupiter and the other giant planets are of a low-density type quite distinct from the terrestrial planets: they are composed predominantly of such substances as hydrogen, helium, ammonia, and methane, unlike terrestrial planets. Much of Jupiter's interior might be in the form of liquid, metallic hydrogen. Normally, hydrogen is a gas, but under pressures of millions of kilograms per square centimeter, which exist in the deep interior of Jupiter, the hydrogen atoms might lock together to form a liquid with the properties of a metal. Some scientists believe that the innermost core of Jupiter might be rocky, or metallic like the core of Earth. Jupiter rotates very fast, once every 9.8 hours. As a result, its clouds, which are composed largely of frozen and liquid ammonia, have been whipped into alternating dark and bright bands that circle the planet at different speeds in different latitudes. Jupiter's puzzling Great Red Spot changes size as it hovers in the Southern Hemisphere. Scientists speculate it might be a gigantic hurricane, which because of its large size (the Earth could easily fit inside it), lasts for hundreds of years. Jupiter gives off twice as much heat as it receives from the Sun. Perhaps this is primeval heat or heat generated by the continued gravitational contraction of the planet. Another starlike characteristic of Jupiter is its sixteen natural satellites, which, like a miniature model of the Solar System, decrease in density with distance—from rocky moons close to Jupiter to icy moons farther away. If Jupiter were about 70 times more massive, it would have become a star. Jupiter is the best-preserved sample of the early solar nebula, and with its satellites, might contain the most important clues about the origin of the Solar System.

29. The word “attained” in line 4 is closest in meaning to ....

- (A) attempted
- (B) changed
- (C) lost
- (D) reached

30. The word “flamed” in line 5 is closest in meaning to ....

- (A) burned
- (B) divided
- (C) fallen
- (D) grown

31. The word “they” in line 6 refers to ....

- (A) nuclear reactions
- (B) giant planets
- (C) terrestrial
- (D) substances

32. According to the passage, hydrogen can become a metallic-like liquid when it is ....

- (A) extremely hot
- (B) combined with helium
- (C) similar atmospheres
- (D) metallic cores

33. According to the passage, some scientists believe Jupiter and Earth are similar in that they both have

- (A) solid surfaces
- (B) similar masses
- (C) similar atmospheres
- (D) metallic cores

34. The clouds surrounding Jupiter are mostly composed of ....

- (A) ammonia
- (B) helium
- (C) hydrogen
- (D) methane



35. It can be inferred from the passage that the appearance of alternating bands circling Jupiter is caused by ....
- (A) the Great Red Spot
  - (B) heat from the Sun
  - (C) the planet's fast rotation
  - (D) Storms from the planet's Southern Hemisphere
36. The author uses the word "puzzling" in line 15 to suggest that the Great Red Spot is ....
- (A) the only spot of its kind
  - (B) not well understood
  - (C) among the largest of such spots
  - (D) a problem for the planet's continued existence
37. Paragraph 3 supports which of the following conclusions?
- (A) Jupiter gives off twice as much heat as the Sun.
  - (B) Jupiter has a weaker gravitational force than the other planets.
  - (C) Scientists believe that Jupiter was once a star.
  - (D) Scientists might learn about the beginning of the Solar System by Studying Jupiter.
38. Why does the author mention primeval heat (lines 19-20) ?
- (A) To provide evidence that Jupiter is older than the Sun
  - (B) To provide evidence that Jupiter is older than the other planets
  - (C) To suggest a possible explanation for the number of satellites that Jupiter has
  - (D) To suggest a possible source of the quantity of heat that Jupiter gives off
39. According to the passage, Jupiter's most distant moon is ....
- (A) the least dense
  - (B) the largest
  - (C) warm on the surface
  - (D) very rocky on the surface
40. Which of the following statements is supported by the passage?
- (A) If Jupiter had fewer satellites, it would be easier for scientists to study the planet itself.
  - (B) If Jupiter had had more mass, it would have developed internal nuclear reactions.
  - (C) If Jupiter had been smaller, it would have become a terrestrial planet.
  - (D) if Jupiter were larger, it would give off much less heat

#### Questions 41-50

The term "art deco" has come to encompass three distinct but related design trends of the 1920's and 1930's. The first was what is frequently referred to as "zigzag moderne"—the exotically ornamental style of such skyscrapers as the Chrysler Building in New York City and related structures such as the Paramount Theater in Oakland, California. The word "zigzag" alludes to the geometric and stylized ornamentation of zigzags, angular patterns, abstracted plant and animal motifs, sunbursts, astrological imagery, formalized fountains, and related themes that were applied in mosaic relief and mural form to the exterior and interior of the buildings. Many of these buildings were shaped in the ziggurat form, a design resembling an ancient Mesopotamian temple tower that recedes in progressively smaller stages to the summit, creating a staircase-like effect. The second manifestation of art deco was the 1930's streamlined moderne" style—a Futuristic-looking aerodynamic style of rounded corners and horizontal bands known as "speed stripes." In architecture, these elements were frequently accompanied by round windows, extensive use of glass block, and flat rooftops.

The third style, referred to as either "international stripped classicism," or simply "classical moderne," also came to the forefront during the Depression, a period of severe economic difficulty in the 1930's. This was a more conservative style, blending a simplified modernistic style with a more austere form of geometric and stylized relief sculpture and other ornament, including interior murals. Many buildings in this style were erected nationwide through government programs during the Depression.

Although art deco in its many forms was largely perceived as thoroughly modern,

it was strongly influenced by the decorative arts movements that immediately preceded it. For example, like “art nouveau” (1890-1910), art deco also used plant motifs, but regularized the forms into abstracted repetitive patterns rather than presenting them as flowing, asymmetrical foliage. Like the Viennese craftspeople of the Wiener Werkstatte, art deco designers worked with exotic materials, geometricized shapes, and colorfully ornate patterns. Furthermore, like the artisans of the Arts and Crafts Movement in England and the United States, art deco practitioners considered it their mission to transform the domestic environment through well-designed furniture and household accessories.

41. What aspect of art deco does the passage mainly discuss?

- (A) The influence of art deco on the design of furniture and household accessories
- (B) Ways in which government programs encouraged the development of art deco
- (C) Architectural manifestations of art deco during the 1920’s and 1930’s
- (D) Reasons for the popularity of art deco in New York and California

42. The word “encompass” in line 1 is closest in meaning to ....

- (A) separate
- (B) include
- (C) replace
- (D) enhance

43. The phrase “The first” in line 2 refers to ....

- (A) the term “art deco”
- (B) design trends
- (C) the 1920’s and 1930’s
- (D) skyscrapers

44. In line 9, the author mentions “an ancient Mesopotamian temple tower ” in order to ....

- (A) describe the exterior shape of certain “art deco” buildings
- (B) explain the differences between ancient and modern architectural steles
- (C) emphasize the extent of architectural advances
- (D) argue for a return to more traditional architectural design

45. The streamlined moderne style is characterized by all of the following EXCEPT ....

- (A) animal motifs
- (B) flat roofs
- (C) round windows
- (D) “speed stripes”

46. The phrase “came to the forefront” in line 16 is closest in meaning to ....

- (A) grew in complexity
- (B) went through a process
- (C) changed its approach
- (D) became important

47. According to the passage, which of the following statements most accurately describes the relationship between art deco and art nouveau?

- (A) They were art forms that competed with each other for government support during the Depression era.
- (B) They were essentially the same art form.
- (C) Art nouveau preceded art deco and influenced it.
- (D) Art deco became important in the United States while art nouveau became popular in England.

48. According to the passage, a building having an especially ornate appearance would most probably have been designed in the style of ....

- (A) zigzag moderne
- (B) streamlined moderne
- (C) classical moderne
- (D) the Arts and Crafts Movement



49. According to the passage, which of the following design trends is known by more than one name ?  
(A) Zigzag moderne  
(B) Streamlined moderne  
(C) International stripped classicism  
(D) Arts and Crafts Movement
50. The passage is primarily developed as ....  
(A) the historical chronology of a movement  
(B) a description of specific buildings that became famous for their unusual beauty  
(C) an analysis of various trends within an artistic movement  
(D) an argument of the advantages of one artistic form over another

**Answers for the listening section:**

DDACC BBADC BBDCD DABDB ACDAD BCBDC DDBBA BCDDDB ACCDB AADBA

**Answers for the structure and written expression section:**

BABBA BBDCD DBCAD DDCCB ABDCA CADCC ABBDB BCCDD

**Answers for the reading comprehension section:**

BCADB DADDB CADDD CADBC ADCDB DABDA BCDAC BDDAB CBBA A DCACC