

Sample Written - Construction Systems

True/False

Indicate whether the sentence or statement is true or false.

- 1. Remodeling a factory is an example of industrial construction.
- 2. Plastics are one type of structural material.
- 3. A town house is a single building consisting of two apartments.
- 4. Public works projects are usually funded by taxes.
- 5. The land on which a structure is built is a very important part of the capital in construction.
- 6. The design of a structure is influenced by the nature of the site.
- 7. Telephone service is one example of a utility.
- 8. Building codes specify the maximum height a building can be.
- 9. The measurements given on scale drawings are given in the same scale as the drawing, not the actual size.
- 10. An architect or engineer usually oversees a large construction project.
- 11. The contractor who submits the highest bid usually gets the contract.
- 12. A contractor's bid is his or her estimate of what it will cost to build a project.
- 13. To monitor a construction project means the same as to inspect it.
- 14. The materials delivery schedule includes the price of each material.
- 15. Local building inspectors are members of OSHA.
- 16. Contractors are responsible for the actual construction of the project.
- 17. The depth of the hole dug for the foundation depends on the design of the building.
- 18. Skyscrapers are one type of load-bearing wall structure.
- 19. The finish flooring is placed directly over the subflooring.
- 20. Landscaping involves clearing the site of trees, rocks, and excess dirt.
- 21. If a building is to have a basement, the foundation walls will become the building's basement walls.
- 22. Before actual construction can be done, all trees must be cleared from the site so they are not in the way of the heavy equipment.
- 23. Sometimes the soil may have to have certain chemicals added to it to make sure it is firm enough to support the structure.
- 24. Doorknobs and towel bars are types of trim.
- 25. HVAC refers to heating, ventilating, and air conditioning systems.
- 26. Air-supported structures must be well anchored to keep them from pulling away from the ground.
- 27. Dirt must be firmly packed around buried pipelines or leaks could later result.
- 28. The Channel is an example of an immersed tunnel.

Sample Written - Construction Systems

- ___ 29. Space construction involves building parts of structures on Earth and then transporting them to space, where they will be assembled.
- ___ 30. Lift bridges tilt upward to allow large water vessels to pass underneath.
- ___ 31. Flexible roadbeds are commonly made of asphalt.
- ___ 32. The main advantage of air-supported structures is their low cost.
- ___ 33. The superstructure of a building is usually below ground level.
- ___ 34. Duplexes, town houses, and other multifamily units are considered to be commercial construction.
- ___ 35. Engineers make sure that building designs are structurally sound.
- ___ 36. Zoning laws specify the number of parking spaces a commercial building must provide.
- ___ 37. The power of eminent domain enforces the rights or needs of all over the rights or needs of one.
- ___ 38. A survey usually includes a written description of the property.
- ___ 39. The foundation walls are the part of the structure that distributes the structure's weight.
- ___ 40. Foundation walls can be made from concrete blocks.
- ___ 41. Sheathing is the layer of material that is placed between the framing and the finished exterior.
- ___ 42. Wallpaper or paint can be applied on top of drywall.
- ___ 43. Swing bridges open by tilting upward.
- ___ 44. The Golden Gate Bridge in San Francisco is an example of a cable-stayed bridge.
- ___ 45. Cofferdams are temporary structures.
- ___ 46. Navigation canals can connect two bodies of water.
- ___ 47. Adhesives are being used more and more in place of nails in construction today.
- ___ 48. About 50 percent of a tree is used when it is harvested for conventional lumber.
- ___ 49. In panelized construction, the entire structure is built at a factory and shipped to the site.
- ___ 50. Some smaller construction projects are managed by a contractor rather than an architect or engineer.

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- ___ 51. The collapse of a bridge is an example of...
 - a. an output.
 - b. lack of enough input.
 - c. feedback.
 - d. an environmental disaster.
- ___ 52. Before a house can be constructed, information must be gathered about...
 - a. whether the land is flat or hilly.
 - b. the people who will be living in it.
 - c. the lot size and exact boundaries of the lot.
 - d. all of these.
- ___ 53. Building codes specify...
 - a. the materials and methods that must be used for construction.
 - b. what type of buildings can be built in a certain area.
 - c. how many people can live in a certain size or type structure.
 - d. all of these.

Sample Written - Construction Systems

- ___ 54. Building a shopping mall is an example of ___?___ construction.
- a. industrial
 - b. retail
 - c. commercial
 - d. public works
- ___ 55. Building a hospital is an example of ___?___ construction.
- a. residential
 - b. commercial
 - c. industrial
 - d. public works
- ___ 56. An example of a hand tool is...
- a. a wrench.
 - b. a power saw.
 - c. a wheelbarrow.
 - d. all of these.
- ___ 57. Brick is an example of...
- a. a manufactured material.
 - b. a structural material.
 - c. a type of masonry.
 - d. all of these.
- ___ 58. Which of the following is **not** true of steel?
- a. made from iron and carbon
 - b. can be formed into various structural shapes
 - c. resistant to corrosion
 - d. rapidly loses strength when exposed to very high temperatures
- ___ 59. Plywood, particleboard, waferboard, laminated veneer lumber, and glulam are all types of...
- a. dimension lumber.
 - b. engineered wood materials.
 - c. board lumber.
 - d. conventional solid-sawn lumber.
- ___ 60. Tax money is used to pay for...
- a. commercial construction projects.
 - b. projects initiated by the public sector of our economy.
 - c. industrial construction projects.
 - d. all of these.
- ___ 61. The first step in the design process is...
- a. identifying specific needs.
 - b. developing preliminary ideas.
 - c. analyzing the plan.
 - d. preparing the specifications.
- ___ 62. A sophisticated device used for surveying, called an electronic distance meter, uses ___?___ to measure distance.
- a. telescopic instruments
 - b. mathematical equations
 - c. a measuring tape
 - d. a laser
- ___ 63. When planning development of a community, city planners must consider...
- a. the size and character of the community's population.
 - b. transportation facilities.
 - c. the economy of the community.
 - d. all of these.
- ___ 64. Which of the following is **not** considered when choosing a lot on which to build?
- a. the design of the planned structure
 - b. zoning laws
 - c. climate conditions
 - d. shape of the lot
- ___ 65. The work schedule shows the...
- a. skills or crafts needed.
 - b. time required for each process.
 - c. order or sequence of jobs.
 - d. all of these.
- ___ 66. The financial schedule shows amounts and dates for...
- a. paying wages to workers.
 - b. purchasing materials and supplies.
 - c. payments to be made to a contractor.
 - d. all of these.
- ___ 67. The person responsible for drawing up the work schedule is the...
- a. architect.
 - b. contractor.
 - c. subcontractor.
 - d. project monitor.

Sample Written - Construction Systems

- ___ 68. The person responsible for drawing up the financial schedule is the...
- a. architect or engineer.
 - b. contractor.
 - c. purchasing agent.
 - d. banker.
- ___ 69. Which of the following is **not** one of three main schedules used to control construction?
- a. financial schedule
 - b. work schedule
 - c. materials delivery schedule
 - d. inspection schedule
- ___ 70. The person responsible for checking all construction materials as they are received is the...
- a. contractor.
 - b. purchasing agent.
 - c. inspector.
 - d. subcontractor.
- ___ 71. Those who specialize in certain types of construction work, such as plumbing or electrical wiring, are called...
- a. craftspeople.
 - b. systems specialists.
 - c. subcontractors.
 - d. none of these.
- ___ 72. Inspectors are concerned with...
- a. the quality and appropriateness of materials.
 - b. the methods used.
 - c. the quality of the work.
 - d. all of these.
- ___ 73. Measuring and marking the site in order to identify the boundaries of the property is called...
- a. staking out a claim.
 - b. laying out the site.
 - c. surveying.
 - d. finishing the site.
- ___ 74. Sometimes the doors, windows, and/or lighting fixtures of an older home that is being torn down are saved to put in newer homes. This process of saving such items for reuse is called...
- a. renovation.
 - b. demolition.
 - c. salvaging.
 - d. refurbishing.
- ___ 75. The ___?___ act as a guide for excavating for the foundation.
- a. surveyor's stakes
 - b. batter boards
 - c. boundary markers
 - d. transits
- ___ 76. Which of the following would be done first?
- a. installing finish flooring
 - b. putting up drywall
 - c. putting in plumbing fixtures
 - d. putting in electrical wiring
- ___ 77. The process of identifying and marking the exact location of the structure on the property is called...
- a. roughing-in the structure.
 - b. laying the foundation.
 - c. surveying.
 - d. laying out the site.
- ___ 78. The sizes and locations of driveways, sidewalks, and patios are...
- a. indicated on the working drawings.
 - b. marked by the surveyor.
 - c. determined by the landscape architect.
 - d. all of these.
- ___ 79. The part of the structure below the foundation wall, called the footing, is usually...
- a. the same width as the foundation wall.
 - b. twice as wide as the foundation wall.
 - c. twice as wide as it is deep.
 - d. three times the width of the foundation wall.
- ___ 80. A flexible roadbed has...
- a. a sand subbase.
 - b. a thick gravel subbase.
 - c. an asphalt subbase.
 - d. no subbase.
- ___ 81. Which type of bridge is most widely used in the U.S. to span long distances?
- a. beam bridge
 - b. cable-stayed bridge
 - c. cantilever bridge
 - d. suspension bridge

Sample Written - Construction Systems

- ___ 82. The part of the dam that blocks the flow of water is the...
- a. embankment.
 - b. outlet works.
 - c. spillway.
 - d. lock.
- ___ 83. The ___?___ act(s) as a safety valve that allows excess water to bypass the dam when there is heavy flooding.
- a. cofferdam
 - b. piles
 - c. spillway
 - d. outlet works
- ___ 84. When water is needed downstream, gates of the ___?___ are opened to let water flow through the dam.
- a. lock
 - b. spillway
 - c. embankment
 - d. outlet works
- ___ 85. X-rays and ultrasound are used to check...
- a. the stability of a tunnel wall during construction.
 - b. the watertightness of cofferdams.
 - c. the strength of concrete used in bridges.
 - d. for leaks in pipelines.
- ___ 86. Air-supported structures are primarily used...
- a. in areas where there are limited building materials.
 - b. for exhibition buildings.
 - c. by the military.
 - d. in mild climates.
- ___ 87. Two sets of doors are used in an air-supported structure. The purpose of this is to...
- a. provide a separate entrance and exit for better traffic flow.
 - b. provide a constant flow of air.
 - c. create an air lock to equalize pressure.
 - d. distribute tension evenly throughout the structure.
- ___ 88. When a river has a portion that bends too much for large water vessels to get through, a ___?___ is constructed.
- a. irrigation canal
 - b. lock
 - c. navigation canal
 - d. spillway
- ___ 89. Another name for a town house is...
- a. apartment house.
 - b. duplex.
 - c. row house.
 - d. condominium.
- ___ 90. Schools and parks are part of ___?___ construction.
- a. residential
 - b. industrial
 - c. public works
 - d. commercial
- ___ 91. The structural material that goes through a curing process to increase its strength is...
- a. wood.
 - b. concrete.
 - c. steel.
 - d. aluminum.
- ___ 92. Which of the following descriptions of masonry construction is **not** true?
- a. It is fireproof.
 - b. It is a sturdy material.
 - c. It never needs repair.
 - d. It takes a lot of skilled labor.
- ___ 93. OSHA, an agency of the U.S. Department of Labor, is responsible for...
- a. making sure construction projects do not negatively impact the environment.
 - b. setting zoning laws in each community.
 - c. enforcing a national building code.
 - d. setting and enforcing safety standards for workers.
- ___ 94. Batter boards are used in construction...
- a. to guide excavation.
 - b. as a barrier to protect the public from injury.
 - c. to secure the building before windows and doors are installed.
 - d. as a subfloor.

Sample Written - Construction Systems

- _____ 95. The parallel, evenly spaced, horizontal boards that form the frames that support floors and ceilings in a building are called...
- a. studs.
 - b. batter boards.
 - c. joists.
 - d. trusses.
- _____ 96. Doorknobs and towel bars are examples of...
- a. trim.
 - b. hardware.
 - c. moldings.
 - d. accessories.
- _____ 97. The supports at the ends of a bridge are called...
- a. piers.
 - b. trusses.
 - c. piles.
 - d. abutments.
- _____ 98. The bridge that is supported by a triangular framework is the _?_ bridge.
- a. truss
 - b. beam
 - c. arch
 - d. cantilever
- _____ 99. A bascule bridge is an example of a(n) _?_ bridge.
- a. arch
 - b. suspension
 - c. movable
 - d. cantilever
- _____ 100. Contractors usually employ _?_ who are responsible for obtaining the right materials at the right time.
- a. purchasing agents
 - b. subcontractors
 - c. architects
 - d. monitors

Sample Written - Construction Systems

2001 TSA State Conference - Construction Systems

Answer Section

TRUE/FALSE

1. T
2. T
3. F
4. T
5. T
6. T
7. T
8. F
9. F
10. T
11. F
12. F
13. F
14. T
15. F
16. T
17. T
18. F
19. F
20. F
21. T
22. F
23. T
24. F
25. T
26. T
27. T
28. F
29. T
30. F
31. T
32. F
33. F
34. F
35. T
36. T
37. T
38. T
39. F
40. T
41. T

Sample Written - Construction Systems

- 42. T
- 43. F
- 44. F
- 45. T
- 46. T
- 47. T
- 48. F
- 49. F
- 50. T

MULTIPLE CHOICE

- 51. C
- 52. D
- 53. A
- 54. C
- 55. D
- 56. A
- 57. D
- 58. C
- 59. B
- 60. B
- 61. A
- 62. D
- 63. D
- 64. C
- 65. D
- 66. C
- 67. B
- 68. A
- 69. D
- 70. B
- 71. C
- 72. D
- 73. C
- 74. C
- 75. B
- 76. D
- 77. D
- 78. A
- 79. B
- 80. B
- 81. D
- 82. A
- 83. C
- 84. D

Sample Written - Construction Systems

- 85. D
- 86. B
- 87. C
- 88. C
- 89. C
- 90. C
- 91. B
- 92. C
- 93. D
- 94. A
- 95. C
- 96. B
- 97. D
- 98. A
- 99. C
- 100. A