**AG CONSTRUCTION**

**MULTIPLE CHOICE**

 1. A handbook that sets minimum standards for electrical wiring is called the

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Electricians Wiring Book | c. | National Electrical Code |
| b. | Journeyman’s Handbook | d. | Workman’s Code |

ANS: C PTS: 1

 2. A unit of measure of the rate of flow of electricity through a wire is known as

|  |  |  |  |
| --- | --- | --- | --- |
| a. | amperage | c. | wattage |
| b. | voltage | d. | ohms |

ANS: A PTS: 1

 3. A unit of measure of electrical pressure is known as

|  |  |  |  |
| --- | --- | --- | --- |
| a. | amperage | c. | wattage |
| b. | voltage | d. | ohms |

ANS: B PTS: 1

 4. A unit of measure of electricity that is derived from multiplying volts and amps is called

|  |  |  |  |
| --- | --- | --- | --- |
| a. | PSI | c. | wattage |
| b. | resistance | d. | ohms |

ANS: C PTS: 1

 5. The measure of resistance in a circuit to the flow of an electric current is called

|  |  |  |  |
| --- | --- | --- | --- |
| a. | amperage | c. | wattage |
| b. | voltage | d. | ohms |

ANS: D PTS: 1

 6. A complete path through which electricity flows is called a

|  |  |  |  |
| --- | --- | --- | --- |
| a. | conduit | c. | conductor |
| b. | circuit | d. | fuse |

ANS: B PTS: 1

 7. A safety device which opens the circuit by tripping a switch is called a

|  |  |  |  |
| --- | --- | --- | --- |
| a. | circuit breaker | c. | breaker box |
| b. | fuse | d. | short circuit |

ANS: A PTS: 1

 8. A material that permits electricity to flow freely is called a/an

|  |  |  |  |
| --- | --- | --- | --- |
| a. | outlet | c. | volt |
| b. | circuit | d. | conductor |

ANS: D PTS: 1

 9. GFCI is an electrical device that stands for

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Ground Fault Circuit Information | c. | Ground Fault Circuit Interrupter |
| b. | Ground Fuse Circuit Interrupter | d. | Ground Feeder Circuit Interrupter |

ANS: C PTS: 1

 10. Steel or plastic pipe used to protect electrical wires

|  |  |  |  |
| --- | --- | --- | --- |
| a. | PVC | c. | conductors |
| b. | CPVC | d. | conduit |

ANS: D PTS: 1

 11. An improper connection between hot and neutral wires or between hot wires:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | short circuit | c. | tripped circuit |
| b. | blown circuit | d. | branch circuit |

ANS: A PTS: 1

 12. Most residential wiring is made of a material called

|  |  |  |  |
| --- | --- | --- | --- |
| a. | copper | c. | aluminum |
| b. | iron | d. | steel |

ANS: A PTS: 1

 13. Most common size wire used to wire circuits in homes is

|  |  |  |  |
| --- | --- | --- | --- |
| a. | # 14 | c. | # 10 |
| b. | # 12 | d. | # 16 |

ANS: B PTS: 1

 14. Single-pole breakers are used for each \_\_\_\_\_ volt circuit.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 240 | c. | 75 |
| b. | 500` | d. | 120 |

ANS: D PTS: 1

 15. Double-pole breakers are used for each \_\_\_\_\_ volt circuit.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 240 | c. | 75 |
| b. | 500 | d. | 120 |

ANS: A PTS: 1

 16. A single-pole switch has

|  |  |  |  |
| --- | --- | --- | --- |
| a. | one conductor terminal | c. | three conductor terminals |
| b. | two conductor terminals | d. | four conductor terminals |

ANS: B PTS: 1

 17. A three-way switch has

|  |  |  |  |
| --- | --- | --- | --- |
| a. | one conductor terminal | c. | three conductor terminals |
| b. | two conductor terminals | d. | four conductor terminals |

ANS: C PTS: 1

 18. A four-way switch has

|  |  |  |  |
| --- | --- | --- | --- |
| a. | one conductor terminal | c. | three conductor terminals |
| b. | two conductor terminals | d. | four conductor terminals |

ANS: D PTS: 1

 19. Which color of wire is called the “neutral” wire?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | red | c. | black |
| b. | white | d. | bare |

ANS: B PTS: 1

 20. Which color of wire is called the “hot” wire?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | blue | c. | black |
| b. | white | d. | bare |

ANS: C PTS: 1

 21. Which color of wire is considered to be an “additional hot” wire?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | red | c. | black |
| b. | white | d. | bare |

ANS: A PTS: 1

 22. The purpose of the “bare” wire is for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | energy | c. | wiring directly to the common terminal |
| b. | conducting electricity during the normal operation of the circuit | d. | safety |

ANS: D PTS: 1

 23. Which two colors of wires would be used to wire a single-pole switch?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | black and white | c. | black and red |
| b. | red and white | d. | red and green |

ANS: A PTS: 1

 24. Which three colors of wires would be used to wire 3-way switches?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | red, black and green | c. | red, black and white |
| b. | red, black and blue | d. | black, white and blue |

ANS: C PTS: 1

 25. Which three colors of wires would be used to wire 4-way switches?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | red, black and green | c. | red, black and white |
| b. | red, black and blue | d. | black, white and blue |

ANS: C PTS: 1

 26. Which type switch would be used to control a light from only one location?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | single-pole switch | c. | 3- way switch |
| b. | 2-way switch | d. | 4-way switch |

ANS: A PTS: 1

 27. Which type switch would be used to control a light from two different locations?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | single-pole switch | c. | 3-way switch |
| b. | 2-way switch | d. | 4-way switch |

ANS: C PTS: 1

 28. Which of the following materials is considered to be a good insulator?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | water | c. | wire  |
| b. | a GFCI | d. | rubber |

ANS: D PTS: 1

 29. A connection of two or more conductors is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | terminal | c. | joint |
| b. | lug | d. | splice |

ANS: D PTS: 1

 30. The electrical symbol “S” represents a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | single-pole switch | c. | solid switch |
| b. | safety switch | d. | special switch |

ANS: A PTS: 1

 31. The electrical symbol S2 represents a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | single-pole switch | c. | double-pole switch |
| b. | two-way switch | d. | two-sided switch |

ANS: C PTS: 1

 32. The electrical symbol S3 represents a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | three-way service | c. | three-way solenoid |
| b. | three-way signal | d. | three-way switch |

ANS: D PTS: 1

 33. An octagon electrical box would have \_\_\_\_\_ sides.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 8 | c. | 5 |
| b. | 6 | d. | 4 |

ANS: A PTS: 1

 34. PVC pipe is \_\_\_\_\_\_\_\_ in color.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | white | c. | beige |
| b. | red | d. | black |

ANS: A PTS: 1

 35. Which of the following types of pipe can be flared?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | galvanized | c. | soft copper  |
| b. | steel | d. | hard copper |

ANS: C PTS: 1

 36. What is the actual size of a 2 x 4?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1 1/2 x 3 1/2 | c. | 1 1/2 x 3 1/4 |
| b. | 1 3/4 x 3 1/2 | d. | 1 1/2 x 3 3/4 |

ANS: A PTS: 1

 37. What is the actual size of a 2 x 8?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1 1/2 x 7 1/2 | c. | 1 3/4 x 7 1/4 |
| b. | 1 1/2 x 7 1/4 | d. | 1 3/4 x 7 1/2 |

ANS: B PTS: 1

 38. What is the actual size of a 1 x 6?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1/2 x 5 1/2 | c. | 1/2 x 5 1/4 |
| b. | 3/4 x 5 1/2 | d. | 1/2 x 5 3/4 |

ANS: B PTS: 1

 39. What is the actual size of a 1 x 12?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1/2 x 11 1/4 | c. | 3/4 x 11 1/4 |
| b. | 1/2 x 11 1/2 | d. | 3/4 x 11 1/2 |

ANS: C PTS: 1

 40. How many board feet in a 2 x 4 x 12?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 12 | c. | 8 |
| b. | 96 | d. | 6 |

ANS: C PTS: 1

 41. How many board feet in a 2 x 6 x 10?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 120 | c. | 8 |
| b. | 10 | d. | 6 |

ANS: B PTS: 1

 42. How many board feet in a 1 x 4 x 6?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 2 | c. | 10 |
| b. | 24 | d. | 6 |

ANS: A PTS: 1

 43. How many board feet in 5 pieces of 2 x 4 x 12?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 96 | c. | 12 |
| b. | 480 | d. | 40 |

ANS: D PTS: 1

 44. How many board feet in 10 pieces of 2 x 6 x 8?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 80 | c. | 96 |
| b. | 8 | d. | 960 |

ANS: A PTS: 1

 45. The unit of measure used to designate the length of most nails is the word \_\_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | diameter | c. | gauge |
| b. | caliber | d. | penny |

ANS: D PTS: 1

 46. Which type nail has the smallest head?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | roofing nail | c. | finishing nail |
| b. | plaster board nail | d. | common nail |

ANS: C PTS: 1

 47. Which one of the following are screws **not** classified by:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | penny | c. | length |
| b. | gauge | d. | type material made from |

ANS: A PTS: 1

 48. Which measurement is bigger?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | ¾ in. | c. | ¼ in. |
| b. | 7/8 in. | d. | ½ in. |

ANS: B PTS: 1

 49. Which measurement is bigger?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 9/16 in. | c. | 5/8 in. |
| b. | ¼ in. | d. | 5/16 in. |

ANS: C PTS: 1

 50. Which measurement is bigger?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 15/32 in. | c. | ¼ in. |
| b. | 5/16 in. | d. | 7/16 in. |

ANS: A PTS: 1

 51. Which screw is bigger?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 6 gauge | c. | 10 gauge |
| b. | 8 gauge | d. | 12 gauge |

ANS: D PTS: 1

 52. Screw gauge refers to the \_\_\_\_\_\_\_\_ of the screw?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | type | c. | diameter |
| b. | threads | d. | length |

ANS: C PTS: 1

 53. What is another name for a framing square?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | builder’s square | c. | try square |
| b. | combination square | d. | carpenter’s square |

ANS: D PTS: 1

 54. Which of the following types of hammers has a straighter claw?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | ball peen hammer | c. | ripping claw hammer |
| b. | blacksmith’s hammer | d. | curved claw hammer |

ANS: C PTS: 1

 55. The slit that is made in a piece of wood when cutting all the way through with a saw is called a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | groove | c. | notch |
| b. | kerf | d. | dado |

ANS: B PTS: 1

 56. Which saw would be used when cutting a hole in sheetrock?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | coping saw | c. | back saw |
| b. | hand saw | d. | keyhole saw |

ANS: D PTS: 1

 57. Which type tool would be used to drill a hole in a door for a doorknob?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | wood bit | c. | hole saw |
| b. | spade bit | d. | countersink bit |

ANS: C PTS: 1

 58. The end of the hammer that makes contact with the nail is called the \_\_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | head | c. | cheek |
| b. | poll | d. | face |

ANS: D PTS: 1

 59. The size of a claw hammer is determined by the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | weight of the head | c. | length of the handle  |
| b. | weight of the entire hammer | d. | length of the head |

ANS: A PTS: 1

 60. Which of the following tools would be used to check structural members to see if they are horizontal or vertical?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | framing square | c. | jointer plane |
| b. | level | d. | plumb bob |

ANS: B PTS: 1

 61. Driving a nail at an angle in order to permit it to penetrate into a second framing member is known as:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | angle nailing | c. | toenailing |
| b. | force driving | d. | slant driving |

ANS: C PTS: 1

 62. OSB stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | orientated strand board | c. | official stud board |
| b. | off set board | d. | over size board |

ANS: A PTS: 1

 63. What is the standard size of a sheet of plywood?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 4 ft. x 8 ft. | c. | 4 ft. x 10 ft. |
| b. | 2 ft. x 4 ft. | d. | 4 ft. x 12 ft. |

ANS: A PTS: 1

 64. Wood from a broadleaved tree is known as:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | evergreen | c. | hardwood |
| b. | conifer | d. | softwood |

ANS: C PTS: 1

 65. Evergreen trees are referred to as:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | deciduous | c. | hardwood |
| b. | conifers | d. | broadleaved |

ANS: B PTS: 1

 66. What is responsible for the grain patterns that are seen in the surface of boards?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | saw marks | c. | the type of tree it is from |
| b. | markings made at the sawmill | d. | annual growth rings |

ANS: D PTS: 1

 67. A person who designs and oversees the construction of a building is a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | contractor | c. | engineer |
| b. | carpenter | d. | architect |

ANS: D PTS: 1

 68. When cement, sand and gravel are mixed with water it is known as:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | concrete | c. | mortar |
| b. | cement | d. | grout |

ANS: A PTS: 1

 69. One cubic yard of concrete contains \_\_\_\_\_cubic feet.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 9 | c. | 27 |
| b. | 36 | d. | 54 |

ANS: C PTS: 1

 70. 1 mile is \_\_\_\_\_ feet.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 5,000 | c. | 640 |
| b. | 5,280 | d. | 750 |

ANS: B PTS: 1

 71. 1 chain is \_\_\_\_\_ feet

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 10 | c. | 66 |
| b. | 40 | d. | 70 |

ANS: C PTS: 1

 72. What is the three-legged device called that holds the level-transit?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | three-legged mount | c. | transit stand |
| b. | tripod | d. | transit base |

ANS: B PTS: 1

 73. What is the device called that is used to sight level lines and lay out or measure horizontal lines?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | horizontal transit | c. | builder’s level |
| b. | line level | d. | level-transit |

ANS: C PTS: 1

 74. The lower part of a roof that projects over an exterior wall is called a/an \_\_\_\_\_\_\_\_. Also called the overhang.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | soffit | c. | fascia |
| b. | tail | d. | eave |

ANS: D PTS: 1

 75. Concrete has high \_\_\_\_\_\_\_\_ strength.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | compression | c. | internal  |
| b. | tensile | d. | external |

ANS: A PTS: 1

 76. Which of the following would **not** increase the tensile strength of concrete?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | steel fibers | c. | reinforcement wire |
| b. | reinforcement bars | d. | gravel |

ANS: D PTS: 1

 77. The process of which concrete hardens by adding water is called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | hardening | c. | dilution |
| b. | dehydration | d. | hydration |

ANS: D PTS: 1

 78. The narrow space between adjacent stones, bricks or blocks that is filled with mortar is called a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | cement joint | c. | mortar groove |
| b. | mortar gap | d. | mortar joint |

ANS: D PTS: 1

 79. A temporary structure made of metal pipes or tubes that allows brick layers or construction workers to perform their jobs at certain heights is called a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | scaffold | c. | lift |
| b. | ladder | d. | construction platform |

ANS: A PTS: 1

 80. Which type paint is cleaned up with water?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | oil based | c. | semi-gloss |
| b. | latex | d. | high gloss |

ANS: B PTS: 1

 81. Which type paint is cleaned up with mineral spirits?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | oil based | c. | semi-gloss |
| b. | latex | d. | high gloss |

ANS: A PTS: 1

 82. Which of the following is **not** considered to be a clear coating applied over wood?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | stain | c. | lacquer |
| b. | varnish | d. | sealer |

ANS: A PTS: 1

 83. Most natural-fiber paint brushes are made from the hair of \_\_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | sheep  | c. | cattle |
| b. | goats | d. | hogs |

ANS: D PTS: 1

 84. The material used to give paint its color is:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | pigment | c. |  resin |
| b. | additives | d. | dye |

ANS: A PTS: 1

 85. The coating process used to color and preserve the surface of aluminum is called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | staining | c. | anodizing |
| b. | color preserving | d. | aluminizing |

ANS: C PTS: 1

 86. Which of the shop safety colors means “danger”?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | orange | c. | red |
| b. | yellow | d. | blue |

ANS: C PTS: 1

 87. Which of the shop safety colors means “warning”?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | orange | c. | red |
| b. | yellow | d. | blue |

ANS: A PTS: 1

 88. Which of the shop safety colors means “caution”?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | orange  | c. | blue |
| b. | yellow | d. | purple |

ANS: B PTS: 1

 89. How many shop safety colors are there?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 4 | c. | 7 |
| b. | 6 | d. | 9 |

ANS: D PTS: 1

 90. Which of the following is not a type of warp in wood?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | cup | c. | twist |
| b. | fork | d. | crook |

ANS: B PTS: 1

 91. Which part of the body is the most susceptible to shop injury?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | legs  | c. | head |
| b. | feet | d. | arms and hands |

ANS: D PTS: 1

 92. The thickness of galvanized steel roofing sheets is classified by:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | R value | c. | mil thickness |
| b. | gauge number | d. | pitch |

ANS: B PTS: 1