**Ag Mechanics CDE - General Ag 2**

**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. | 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. A panel located inside the house from which every circuit branches is called a/an

|  |  |  |  |
| --- | --- | --- | --- |
| a. | ground fault panel | c. | conductor panel |
| b. | service entrance panel | d. | outlet panel |

ANS: B PTS: 1

 10. A laboratory that test electrical wiring materials and devices to assure that the products meet minimum safety standards is called

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Underwriters Laboratory | c. | Journeyman’s Laboratory |
| b. | Electrical Laboratory | d. | Electrical Conductors Laboratory |

ANS: A PTS: 1

 11. 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

 12. Steel or plastic pipe used to protect electrical wires

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

ANS: D PTS: 1

 13. 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

 14. The circuit between the breaker box and one or more outlets:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | feeder circuit | c. | short circuit |
| b. | branch circuit | d. | fault circuit |

ANS: B PTS: 1

 15. The circuit between one breaker box and another breaker box:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | feeder circuit | c. | short circuit |
| b. | branch circuit | d. | fault circuit |

ANS: A PTS: 1

 16. What is the trip level of a GFCI?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 10 - 12 milliamperes | c. | 4 - 6 milliamperes |
| b. | 5 amperes | d. | 120 volts |

ANS: C PTS: 1

 17. How fast will a GFCI trip?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 2 seconds | c. | 1/2 of a second |
| b. | 5 seconds | d. | 1/40 of second |

ANS: D PTS: 1

 18. The type of cable used for direct burial of underground feeder wires is called

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Type NM | c. | Type UFC |
| b. | Type UF | d. | Type NMB |

ANS: B PTS: 1

 19. Most residential wiring is made of a material called

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

ANS: A PTS: 1

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

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

ANS: B PTS: 1

 21. AWG stands for

|  |  |  |  |
| --- | --- | --- | --- |
| a. | American Wire Gauge | c. | American Wire Ground |
| b. | Alabama Wire Gauge | d. | Automatic With Ground |

ANS: A PTS: 1

 22. An outlet box that can only hold one switch or one receptacle is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | simple box | c. | single box |
| b. | one gang box | d. | independent box |

ANS: B PTS: 1

 23. An outlet box that can hold two switches or two receptacles or one switch and one receptacle is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | double box | c. | two gang box |
| b. | twin box | d. | multi-box |

ANS: C PTS: 1

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

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

ANS: D PTS: 1

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

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

ANS: A PTS: 1

 26. Which of the following items would all operate off of 120 volts.

|  |  |
| --- | --- |
| a. | TV, radio, clothes dryer, microwave, and dishwasher |
| b. | TV, radio, hair dryer, microwave, and dishwasher |
| c. | computer, lamp, electric razor, ceiling fan and 80-gallon hot water heater |
| d. | coffee maker, blender, DVD player, electric razor and large heat pump |

ANS: B PTS: 1

 27. 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

 28. 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

 29. 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

 30. A double-pole switch is used for

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 120 volt circuits | c. | large air-conditioners |
| b. | 240 volt circuits | d. | all outside switches |

ANS: B PTS: 1

 31. Type NM cable stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | non-metallic | c. | non-metric |
| b. | new metal | d. | non-matter |

ANS: A PTS: 1

 32. Which color of wire is called the neutral wire?

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

ANS: B PTS: 1

 33. Which color of wire is called the hot wire?

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

ANS: C PTS: 1

 34. Which color of wire is considered to be an additional hot wire?

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

ANS: A PTS: 1

 35. 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

 36. A 12-2 WG cable would have the following:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | one black wire, one white wire and one bare wire | c. | one blue wire, one white wire and one bare wire |
| b. | one red wire, one white wire and one bare wire | d. | one black wire, one red wire and one white wire |

ANS: A PTS: 1

 37. A 12-3 WG cable would have the following:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | one blue wire, one red wire, one white wire and one bare wire | c. | one black wire, one red wire, one white wire and one bare wire |
| b. | one black wire, one red wire, one white wire and one blue wire | d. | one black wire, one blue wire, one white wire and one bare wire |

ANS: C PTS: 1

 38. 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

 39. 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

 40. 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

 41. 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

 42. 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

 43. Which type switches are used in pairs?

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

ANS: C PTS: 1

 44. If a light is being controlled from three different locations, which combination of switches would be used?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | three 3-way switches | c. | one 3-way and two 4-way switches |
| b. | one single-pole and two 4-way switches | d. | two 3-way and one 4-way switch |

ANS: D PTS: 1

 45. If a light is being controlled from five different locations, which combination of switches would be used?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | three 3-way and two 4-way switches | c. | one single-pole and four 4-way switches |
| b. | two 3-way and three 4-way switches | d. | five single-pole switches |

ANS: B PTS: 1

 46. The black wire coming from the breaker box should be connected to which terminal on a 3-way switch?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | brass | c. | neutral |
| b. | silver | d. | common |

ANS: D PTS: 1

 47. The black wire coming from the breaker box should be connected to which terminal on a single-pole switch?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | it doesn’t matter | c. | neutral |
| b. | silver | d. | common |

ANS: A PTS: 1

 48. A 240 volt grain auger motor draws 17 amps under load, what size breaker should you install?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | single pole 20 amp | c. | double pole 20 amp |
| b. | single pole 30 amp | d. | double pole 15 amp |

ANS: C PTS: 1

 49. What is the recommended minimum size or capacity of a residential electrical service?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 150 amps | c. | 200 amps |
| b. | 100 amps | d. | 400 amps |

ANS: C PTS: 1

 50. 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

 51. An instrument used to measure voltage values is called a/an

|  |  |  |  |
| --- | --- | --- | --- |
| a. | voltmeter | c. | volt reader |
| b. | current reader | d. | volt sensor |

ANS: A PTS: 1

 52. A regulatory device which steps up or steps down voltage?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | diode | c. | rectifier |
| b. | transformer | d. | voltmeter |

ANS: B PTS: 1

 53. A point on an electrical device where connections may be made?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tab | c. | terminal |
| b. | groove | d. | toggle |

ANS: C PTS: 1

 54. A station in a power transmission system at which electric power is transformed to a conveniently used form?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | substation | c. | translation |
| b. | electric station | d. | power station |

ANS: A PTS: 1

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

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

ANS: D PTS: 1

 56. An excessive demand on an electric circuit is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | overdemand | c. | overload |
| b. | overwork | d. | resistance |

ANS: C PTS: 1

 57. An electrical instrument used to measure circuit resistance is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | multimeter | c. | voltmeter |
| b. | ammeter | d. | ohmmeter |

ANS: D PTS: 1

 58. An electrical box which is used to bring the wires to the location where an electrical device is installed is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | junction box | c. | power box |
| b. | outlet box | d. | accessory box |

ANS: B PTS: 1

 59. An electrical box with a blank cover used to contain splices of a circuit is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | junction box | c. | terminal box |
| b. | outlet box | d. | splice box |

ANS: A PTS: 1

 60. The main circuit which supplies all other circuits is called the

|  |  |  |  |
| --- | --- | --- | --- |
| a. | main | c. | transformer |
| b. | supplier | d. | head |

ANS: A PTS: 1

 61. A unit of measurement for the flow of light.

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

ANS: D PTS: 1

 62. One thousandth of an ampere can also be called

|  |  |  |  |
| --- | --- | --- | --- |
| a. | multiampere | c. | 1,000 amperes |
| b. | milliampere | d. | .01 amperes |

ANS: B PTS: 1

 63. A wire 4-6 inches in length used to connect a portion of a circuit is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | extension wire | c. | jumper wire |
| b. | extra wire | d. | junction wire |

ANS: C PTS: 1

 64. The term expressing frequency or cycles per second?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | volt | c. | amp |
| b. | hertz | d. | watt |

ANS: B PTS: 1

 65. A flexible wire that can be pushed through conduit and around bends that is used to pull electrical wire through conduit.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | electrical cable | c. | wire puller |
| b. | conduit puller | d. | fish tape |

ANS: D PTS: 1

 66. A threaded sleeve used to join the ends of two lengths of conduit.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | coupling | c. | pipe connector |
| b. | jointer sleeve | d. | threaded connector |

ANS: A PTS: 1

 67. The ability of a current to flow continuously through a conductor?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | free energy | c. | continuous flow |
| b. | continuity | d. | constant flow |

ANS: B PTS: 1

 68. The letters that refer to the quantity of heat required to raise one pound of water one degree Fahrenheit is called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | AWG | c. | BTU |
| b. | NEMA | d. | GFCI |

ANS: C PTS: 1

 69. BTU stands for

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Between The Unground | c. | Battery Transformer Unit |
| b. | Boston Torque Unit | d. | British Thermal Unit |

ANS: D PTS: 1

 70. A flexible metal protective covering enclosing electrical conductors is called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | armored cable | c. | metallic cable |
| b. | conduit | d. | steel cable |

ANS: A PTS: 1

 71. A beginner in a trade is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tradesman | c. | apprentice |
| b. | skilled worker | d. | journeyman |

ANS: C PTS: 1

 72. A tradesperson who has served his or her apprenticeship and is qualified to perform the skills of the trade is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tradesman | c. | apprentice |
| b. | skilled worker | d. | journeyman |

ANS: D PTS: 1

 73. AC stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Alternative Current | c. | Amp Current |
| b. | Alternating Current | d. | Alternating Cycles |

ANS: B PTS: 1

 74. DC stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Direct Current | c. | Direct Continuity |
| b. | Diode Current | d. | Diverse Cycles |

ANS: A PTS: 1

 75. When attaching a conductor to a device terminal, the curved hook on the conductor must be connected:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | so that it has less than a 2/3 wrap | c. | clockwise onto the terminal |
| b. | counterclockwise onto the terminal | d. | so that it overlaps |

ANS: C PTS: 1

 76. Conductors are spliced together by twisting the wires together in a \_\_\_\_\_\_\_\_\_\_\_\_ direction.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | full | c. | counterclockwise |
| b. | non-stop | d. | clockwise |

ANS: D PTS: 1

 77. As a general rule, the amount of insulation that should be stripped off of the wire to make a proper connection is:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 7/8 inch | c. | 5 inches |
| b. | 1/8 inch | d. | 1 foot |

ANS: A PTS: 1

 78. Which of the following materials is **not** something from which electrical boxes are made?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | metal  | c. | fiberglass |
| b. | plastic | d. | rubber |

ANS: D PTS: 1

 79. Which of the following is **not** a common electrical box shape?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | round | c. | triangle |
| b. | rectangle | d. | octagon |

ANS: C PTS: 1

 80. Which of the following shapes for electrical boxes is used only for fixtures such as ceiling lights?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | round  | c. | triangle  |
| b. | rectangle | d. | octagon |

ANS: A PTS: 1

 81. Which of the following shapes for electrical boxes is preferred for wall receptacles and switches?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | round | c. | triangle |
| b. | rectangle | d. | octagon |

ANS: B PTS: 1

 82. Metal boxes usually have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ finish.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | glossy | c. | bright |
| b. | slick | d. | galvanized |

ANS: D PTS: 1

 83. Part of an electrical box that may be removed only to provide an opening for a cable, conduit or fitting.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tabs | c. | knockouts |
| b. | inserts | d. | junction |

ANS: C PTS: 1

 84. The purpose of electrical boxes having removable sides is so that they can be:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | broken down | c. | ganged |
| b. | stored easily | d. | easily accessible |

ANS: C PTS: 1

 85. The electrical symbol S represents a:

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

ANS: A PTS: 1

 86. 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

 87. 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

 88. Which of the following is required to have in a bathroom?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | breaker box | c. | wall heater |
| b. | GFCI | d. | water heater |

ANS: B PTS: 1

 89. Which of the following locations is a requirement to have a GFCI installed?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | shower | c. | outside |
| b. | dining room | d. | bedroom |

ANS: C PTS: 1

 90. Which of the following locations is a requirement to have a GFCI installed?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | living room | c. | hallway |
| b. | crawl spaces | d. | finished basements |

ANS: B PTS: 1

 91. Which of the following locations is a requirement to have a GFCI installed?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | workout room | c. | attic |
| b. | study room | d. | within 6 feet of kitchen sink |

ANS: D PTS: 1

 92. Which of the following locations is a requirement to have a GFCI installed?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | living room | c. | within 10 feet of a fireplace |
| b. | unfinished basements | d. | storm shelter |

ANS: B PTS: 1

 93. An electrical device used in fluorescent fixtures that furnishes the necessary starting and operating current to the bulb.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | solenoid | c. | relay |
| b. | rectifier | d. | ballast |

ANS: D PTS: 1

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

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

ANS: A PTS: 1

 95. Which of the following would **not** be covered by the NEC?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | the size wire to use | c. | the number of receptacles used in a room |
| b. | the color of switches to use | d. | the size of conduit to use |

ANS: B PTS: 1

 96. Which of the following would **not** be covered by the NEC?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | the type of tool used to strip wires | c. | the locations where GFCI’s are required |
| b. | the height of the main disconnect | d. | the amount of voltage drop that is permitted in a circuit |

ANS: A PTS: 1

 97. The decrease in voltage in a circuit is known as

|  |  |  |  |
| --- | --- | --- | --- |
| a. | decreased voltage | c. | voltage drop |
| b. | dropped voltage | d. | current depletion |

ANS: C PTS: 1

 98. Which of the following tools would be the least used when wiring circuits?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | hammer | c. | wire strippers |
| b. | screwdriver | d. | ratchet and socket |

ANS: D PTS: 1

 99. Which of the following tools would be the least used when wiring circuits?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | drill | c. | cable rippers |
| b. | nut driver | d. | needle nose pliers |

ANS: B PTS: 1

 100. An overhead electrical line that runs form the transformer at the utility pole to a building is called the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | service drop | c. | primary line |
| b. | incoming line | d. | transformer line |

ANS: A PTS: 1

 101. PVC stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | polyvinyl calcium | c. | polyvinyl chloride |
| b. | polyvinyl copper | d. | polyethylene chloride |

ANS: C PTS: 1

 102. CPVC stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | covered polyvinyl chloride | c. | chlorinated polyethylene chloride |
| b. | coated polyvinyl chloride | d. | chlorinated polyvinyl chloride |

ANS: D PTS: 1

 103. PEX pipe stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | polyethylene with cross-links | c. | polyethylene x-ray |
| b. | polyethylene xanthone | d. | polyethylene xerox |

ANS: A PTS: 1

 104. In plumbing, ID stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | has no meaning | c. | inside diameter |
| b. | inside die | d. | internal diameter |

ANS: C PTS: 1

 105. In plumbing, OD stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | has no meaning | c. | outside diameter |
| b. | outside die | d. | outward diameter |

ANS: C PTS: 1

 106. Tape use on threaded fittings to prevent water leakage at pipe connections is called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | sealant tape | c. | black tape |
| b. | teflon tape | d. | water tape |

ANS: B PTS: 1

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

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

ANS: A PTS: 1

 108. CPVC pipe is \_\_\_\_\_\_\_\_ in color.

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

ANS: C PTS: 1

 109. PVC pipe is used for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | drinking water only | c. | hot water only |
| b. | hot or cold water | d. | cold water only |

ANS: D PTS: 1

 110. CPVC is used for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | drinking water only | c. | hot water only |
| b. | hot or cold water | d. | cold water only |

ANS: B PTS: 1

 111. DWV pipe stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | ditch, waste and vent | c. | drain, weather and vent |
| b. | ditch, weather and vent | d. | drain, waste and vent |

ANS: D PTS: 1

 112. Removing burrs from the inside edge and the end of pipe is known as:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | reaming | c. | grinding |
| b. | deburring | d. | sanding |

ANS: A PTS: 1

 113. Fittings containing a device that regulates flow or permits flow in only one direction are called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | ferrules | c. | valves |
| b. | unions | d. | sensors |

ANS: C PTS: 1

 114. Which of the following types of galvanized fittings would have a 90 degree angle and have male threads on one end and female threads on the other end?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 90 degree elbow | c. | 90 degree tapered elbow |
| b. | 90 degree street elbow | d. | 90 degree bushing elbow |

ANS: B PTS: 1

 115. Which of the following types of galvanized fittings would allow two different size pipes to be joined together and has male threads on one end and female threads on the other end?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | union | c. | bushing |
| b. | reducer | d. | coupling |

ANS: C PTS: 1

 116. Which of the following types of galvanized fittings would allow two different size pipes to be joined together and has female threads on both ends?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | union | c. | bushing |
| b. | reducer | d. | coupling |

ANS: B PTS: 1

 117. Which of the following types of plastic fittings has threads on one end and has to be glued on the other end?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | adapter | c. | coupling |
| b. | bushing | d. | union |

ANS: A PTS: 1

 118. Which of the following types of plumbing fittings has male threads and is used to close the end of a pipe?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | plug | c. | stopper |
| b. | cap | d. | bushing |

ANS: A PTS: 1

 119. Which of the following types of plumbing fittings has female threads and is used to close the end of galvanized pipe?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | plug | c. | stopper  |
| b. | cap | d. | bushing |

ANS: B PTS: 1

 120. A plumbing fitting used to connect two pieces of similar plastic pipe is called a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | coupling | c. | cap |
| b. | joint | d. | clamp |

ANS: A PTS: 1

 121. A plumbing fitting used to connect two pieces of similar galvanized pipe is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | ferrule | c. | union |
| b. | flange | d. | plug |

ANS: C PTS: 1

 122. Which of the following is true about a plumbing fitting that has male threads?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | it has more strength | c. | it has threads on the inside |
| b. | it is used only in galvanized pipe | d. | it has threads on the outside |

ANS: D PTS: 1

 123. Which of the following is true about a plumbing fitting that has female threads?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | it has less strength | c. | it has threads on the inside |
| b. | it is used only in galvanized pipe | d. | it has threads on the outside |

ANS: C PTS: 1

 124. Galvanized pipe is coated with \_\_\_\_\_\_\_\_ to prevent rust.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | copper | c. | plastic |
| b. | calcium | d. | zinc |

ANS: D PTS: 1

 125. What is the purpose of the coating on galvanized pipe?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | to keep it from bending | c. | to keep the sun from damaging it |
| b. | to make it easier to work with | d. | to keep it from rusting |

ANS: D PTS: 1

 126. A short piece of galvanized pipe threaded at each end is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | extension | c. | nipple |
| b. | fitting | d. | pipe |

ANS: C PTS: 1

 127. When threading steel pipe, which of the following should be used to reduce heat?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | oil | c. | air |
| b. | water | d. | WD-40 |

ANS: A PTS: 1

 128. What is the purpose of applying a paste or flux to copper pipe and the fitting before soldering?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | to make the process easier | c. | to make the pipe last longer |
| b. | to make the process faster | d. | to make the solder penetrate the joint |

ANS: D PTS: 1

 129. In plumbing, the process of joining two pieces of metal using heat and the application of another metal of a different composition is called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | manufacturing | c. | soldering |
| b. | pipe joining | d. | welding |

ANS: C PTS: 1

 130. When soldering copper pipe that is going to be used for drinking water, which of the following types of solder should be used?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 50% lead and 50% tin | c. | 100% lead |
| b. | 60% lead and 40% tin | d. | lead-free  |

ANS: D PTS: 1

 131. Why must copper pipe be cleaned before soldering?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | to make it easier to work with | c. | to make it look better |
| b. | so solder will stick | d. | to increase the water flow |

ANS: B PTS: 1

 132. Which of the following is not recommended to be used when cleaning copper pipe before soldering?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | steel wool | c. | emery cloth |
| b. | grinder | d. | special wire brushes |

ANS: B PTS: 1

 133. When cleaning copper before soldering, what should be cleaned?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | the outside of the pipe and the inside of the fitting | c. | only the inside of both pipe and fitting  |
| b. | the inside of the pipe and the outside of the fitting | d. | only the outside of both pipe and fitting |

ANS: A PTS: 1

 134. When applying heat for soldering copper, which of the following should be done?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | apply heat to the pipe only | c. | apply heat to the pipe and fitting |
| b. | appley heat to the fitting only | d. | apply heat to the solder |

ANS: C PTS: 1

 135. Which of the following terms is used to describe the wall thickness of plastic pipe?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | schedule | c. | gauge |
| b. | diameter | d. | depth |

ANS: A PTS: 1

 136. Which of the following types of PVC pipe is thicker?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | SCH 20 | c. | SCH 60 |
| b. | SCH 40 | d. | SCH 80 |

ANS: D PTS: 1

 137. Which type of plastic pipe is recommended for residential plumbing?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | SCH 10 | c. | SCH 60 |
| b. | SCH 40 | d. | SCH 80 |

ANS: B PTS: 1

 138. Water lines should be buried below the \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ so they will not freeze.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | topsoil | c. | grass roots |
| b. | frost line | d. | soft soil |

ANS: B PTS: 1

 139. Most Bureau of Health regulations require a minimum of \_\_\_\_\_\_\_\_\_\_\_\_ slope for main house drains.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1 inch per foot | c. | 3/4 inch per foot |
| b. | 1 inch per yard | d. | 1/4 inch per foot |

ANS: D PTS: 1

 140. After digging a trench to bury a water line, it must be refilled. This is known as:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | replacing soil | c. | recovering |
| b. | filling in | d. | backfilling |

ANS: D PTS: 1

 141. A fitting installed in a drainpipe in order to have easy access to the pipe to clean out obstructions is called a/an:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | obstruction fitting | c. | insert fitting |
| b. | cleanout fitting | d. | drain fitting |

ANS: B PTS: 1

 142. A flexible auger used to remove clogs in plumbing drains is called a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | twist | c. | plunger |
| b. | De-clogger | d. | snake |

ANS: D PTS: 1

 143. The type tool that is best to use when tightening plumbing fittings that have flat sides is the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | monkey wrench | c. | lineman’s pliers |
| b. | pipe wrench | d. | groove joint pliers |

ANS: A PTS: 1

 144. The type tool that would be most useful for grabbing and holding galvanized pipe?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | monkey wrench | c. | adjustable wrench |
| b. | pipe wrench | d. | lineman’s pliers |

ANS: B PTS: 1

 145. Which of the following is **not** true about PEX pipe?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | quicker to install than plastic pipe | c. | must be glued |
| b. | purchased in rolls instead of joints | d. | when water freezes, the pipe will expand preventing breakage |

ANS: C PTS: 1

 146. When cutting copper or galvanized pipe with a hand pipe cutter, the handle should be tightened about \_\_\_\_\_ turn for each revolution around the pipe.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1/8 | c. | 1/2 |
| b. | 1/4 | d. | 1 |

ANS: B PTS: 1

 147. Which type of pipe can be bent easily?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | copper tubing | c. | galvanized  |
| b. | rigid copper | d. | PVC |

ANS: A PTS: 1

 148. Which type of pipe is easiest to repair?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | copper tubing that must be flared | c. | galvanized |
| b. | rigid copper | d. | PVC |

ANS: D PTS: 1

 149. Before a private sewerage system can be installed on a particular site, the \_\_\_\_\_\_\_\_ Department must approve the installation and issue a building permit.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Police | c. | Resource |
| b. | Chamber of Commerce | d. | Health |

ANS: D PTS: 1

 150. In order for a building permit to be granted, the soil upon which a sewerage system is to be installed must pass a \_\_\_\_\_\_\_\_\_\_ test.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | soil | c. | disposal |
| b. | water | d. | percolation |

ANS: D PTS: 1

 151. 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

 152. 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

 153. 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

 154. 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

 155. What is the nominal size of a 2 x 4?

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

ANS: D PTS: 1

 156. What is the nominal size of a 1 x 8?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 3/4 x 7 1/4 | c. | 1/2 x 7 1/4 |
| b. | 3/4 x 7 1/2 | d. | 1 x 8 |

ANS: D PTS: 1

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

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

ANS: C PTS: 1

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

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

ANS: B PTS: 1

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

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

ANS: A PTS: 1

 160. 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

 161. 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

 162. What is the price of 10 pieces of 2 x 4 x 12 if the sawmill price is $250.00/mbdft?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | $2.00 | c. | $80.00 |
| b. | $240.00 | d. | $20.00 |

ANS: D PTS: 1

 163. What is the price of 5 pieces of 2 x 6 x 10 if the sawmill price is $200.00/mbdft?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | $1.00 | c. | $15.00 |
| b. | $10.00 | d. | $100.00 |

ANS: B PTS: 1

 164. 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

 165. How long is a 20d nail?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 2 | c. | 4 |
| b. | 3 | d. | 5 |

ANS: C PTS: 1

 166. How long is a 16d nail?

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

ANS: B PTS: 1

 167. How long is a 10d nail?

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

ANS: D PTS: 1

 168. How long is a 8d nail?

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

ANS: C PTS: 1

 169. Which type nail would be used in masonry materials?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | duplex nail | c. | finishing nail |
| b. | plaster board nail | d. | cut nail |

ANS: D PTS: 1

 170. Which type nail has two heads?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | box nail | c. | cut nail |
| b. | duplex nail | d. | roofing nail |

ANS: B PTS: 1

 171. Which type nail has the smallest head?

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

ANS: C PTS: 1

 172. Which type nail would be used for light household construction?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | box nail | c. | cut nail |
| b. | common nail | d. | lead head nail |

ANS: A PTS: 1

 173. Which type screw head would have the same shape on top of the head as it does underneath the head?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | oval  | c. | pan |
| b. | round | d. | flat |

ANS: A PTS: 1

 174. 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

 175. Which measurement is bigger?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 3/4 | c. | 1/4 |
| b. | 7/8 | d. | 1/2 |

ANS: B PTS: 1

 176. Which measurement is bigger?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 9/16 | c. | 5/8 |
| b. | 1/4 | d. | 5/16 |

ANS: C PTS: 1

 177. Which measurement is bigger?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 15/32 | c. | 1/4 |
| b. | 5/16 | d. | 7/16 |

ANS: A PTS: 1

 178. Which screw is bigger?

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

ANS: D PTS: 1

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

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

ANS: C PTS: 1

 180. Which of the following hand tools would be best suited for cutting the sole plate out of a doorway in a wall section?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | miter saw | c. | circular saw |
| b. | hand saw | d. | coping saw |

ANS: B PTS: 1

 181. 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

 182. What is the longest part of a framing square called?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | heel | c. | blade |
| b. | handle | d. | tongue |

ANS: C PTS: 1

 183. What is the shortest part of a framing square called?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | heel | c. | blade  |
| b. | handle | d. | tongue |

ANS: D PTS: 1

 184. What is the corner of a framing square called?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | heel | c. | blade  |
| b. | handle  | d. | tongue |

ANS: A PTS: 1

 185. How long is the blade of a standard framing square?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 24 | c. | 16 |
| b. | 20 | d. | 12 |

ANS: A PTS: 1

 186. How long is the tongue of a standard framing square?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 24 | c. | 16 |
| b. | 20 | d. | 12 |

ANS: C PTS: 1

 187. How wide is the blade of a standard framing square?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 2 1/2 | c. | 1 1/2 |
| b. | 2 | d. | 1 |

ANS: B PTS: 1

 188. How wide is the tongue of a standard framing square?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 2 1/2 | c. | 1 1/2 |
| b. | 2 | d. | 1 |

ANS: C PTS: 1

 189. Which of the following would be found on a standard framing square?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | nail sizes | c. | lumber sizes |
| b. | screw gauges | d. | length of common rafter per foot run |

ANS: D PTS: 1

 190. Which of the following saws would not be able to cut all the way through a 1 x 12?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | sliding compound miter saw | c. | back saw |
| b. | hand saw | d. | coping saw |

ANS: D PTS: 1

 191. Which of the following squares would be best suited to layout the slope of a roof on a 2 x 4?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | try square | c. | speed square |
| b. | T square | d. | combination square |

ANS: C PTS: 1

 192. 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

 193. Which of the following types of saws is used with a miter box?

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

ANS: A PTS: 1

 194. What are the two types of hand saws?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | ripping and crosscut | c. | crosscut and straight cut |
| b. | ripping and straight cut | d. | metal and wood |

ANS: A PTS: 1

 195. 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

 196. A tool that is used to transfer angles is called a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | combination square | c. | T bevel |
| b. | try square | d. | awl |

ANS: C PTS: 1

 197. 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

 198. Which type tool would be used to drill a hole in a door for a door knob?

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

ANS: C PTS: 1

 199. What is the proper name of the tool that is used to drive a nail below the surface of the wood?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | nail driver | c. | nail guide |
| b. | nail set | d. | nail punch |

ANS: B PTS: 1

 200. Which of the following is **not** another name for a paddle bit?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | power bit | c. | butterfly bit |
| b. | spade bit | d. | twist bit |

ANS: D PTS: 1

 201. 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

 202. 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

 203. 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

 204. Which of the following squares has an adjustable sliding blade?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | combination square | c. | rafter square |
| b. | speed square | d. | try square |

ANS: A PTS: 1

 205. Which word describes something that is exactly vertical?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | even | c. | plumb |
| b. | upright | d. | level |

ANS: C PTS: 1

 206. Which word describes something that is exactly horizontal?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | even | c. | plumb |
| b. | flat | d. | level |

ANS: D PTS: 1

 207. Which size nail is the most common for nailing floor joist, studs, rafters and ceiling joist?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 8d | c. | 16d |
| b. | 10d | d. | 20d |

ANS: C PTS: 1

 208. \_\_\_\_\_\_\_\_ carry the weight of the building across door and window openings.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Trimmers | c. | Studs |
| b. | Headers | d. | Rafters |

ANS: B PTS: 1

 209. Header length is equal to the rough opening plus the width of \_\_\_\_\_ trimmers.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 2 | c. | 4 |
| b. | 3 | d. | 6 |

ANS: A PTS: 1

 210. To make the thickness of the header match the thickness of the wall, a \_\_\_\_\_ piece of plywood is inserted between the two outside pieces.

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

ANS: B PTS: 1

 211. The studs that run the entire height of the wall are called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | full studs | c. | trimmer studs |
| b. | cripple studs | d. | complete studs |

ANS: A PTS: 1

 212. The studs that support the weight of the header and are located at each end of the header are called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | full studs | c. | trimmer studs |
| b. | cripple studs | d. | complete studs |

ANS: C PTS: 1

 213. The studs that are positioned above a header or below a windowsill are called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | full studs | c. | trimmer studs |
| b. | cripple studs | d. | complete studs |

ANS: B PTS: 1

 214. 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

 215. To add support under ceiling joists and rafters and to also help tie the wall frames together, the top plate of the walls should be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | nailed more | c. | made of 2 x 6’s |
| b. | doubled | d. | glued |

ANS: B PTS: 1

 216. OSB stands for:

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

ANS: A PTS: 1

 217. When installing sheathing on walls, the nails along the edge of the sheathing should be placed approximately \_\_\_\_\_ apart.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 3 | c. | 10 |
| b. | 6 | d. | 12 |

ANS: B PTS: 1

 218. When installing sheathing on walls, the nails in the middle of the sheathing should be placed approximately \_\_\_\_\_ apart.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 3 | c. | 10 |
| b. | 6 | d. | 12 |

ANS: D PTS: 1

 219. What is the material called that covers the exterior of the walls to prevent air form entering or leaving a building through the cracks of the walls?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | insulation | c. | mortar |
| b. | sheathing | d. | house wrap |

ANS: D PTS: 1

 220. When studs are placed 16 O.C., what does the O.C. stand for?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | on course | c. | on center |
| b. | over center | d. | off center |

ANS: C PTS: 1

 221. The bottom plate of a wall section is known as the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | sole plate | c. | bottom board |
| b. | bottom plate | d. | bottom piece |

ANS: A PTS: 1

 222. The first layout to be marked on the plates is the \_\_\_\_\_\_\_\_ spacing.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | trimmer stud | c. | cripple stud |
| b. | regular/full stud | d. | window |

ANS: B PTS: 1

 223. What type mark is made on the plates of a wall to designate where full or regular studs are to be installed?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | F | c. | X |
| b. | R | d. | F/R |

ANS: C PTS: 1

 224. A number related to the efficiency of an insulating material.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 12 | c. | R value |
| b. | 16 | d. | I value |

ANS: C PTS: 1

 225. Horizontal roof members used to support rafters between the plate and ridge board are called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | purlins | c. | chords |
| b. | supports | d. | stringers |

ANS: A PTS: 1

 226. The horizontal line at the junction of the top edges of two roof surfaces is called the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | plate | c. | sill |
| b. | chord | d. | ridge |

ANS: D PTS: 1

 227. An opening formed by framing members is known as the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | opening space | c. | rough opening |
| b. | door and window opening | d. | rough space |

ANS: C PTS: 1

 228. Boards or prefabricated panels that are attached to the exterior of studs or rafters of a structure is called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | siding | c. | exterior panels |
| b. | sheathing | d. | wall board |

ANS: B PTS: 1

 229. The vertical distance from the top of the wall to the ridge of a roof is called the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | span | c. | line length |
| b. | run | d. | rise |

ANS: D PTS: 1

 230. A structural unit consisting of such members as beams, bars, ties or other support pieces that are usually arranged to form triangles and provides rigid support over wide spans is called a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | purlin | c. | truss |
| b. | soffit | d. | rafter |

ANS: C PTS: 1

 231. 6 in 12 is an example of a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | slope of a roof | c. | concrete mix |
| b. | pitch of a roof | d. | board feet calculation |

ANS: A PTS: 1

 232. 1/3 is an example of a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | slope of a roof | c. | concrete mix |
| b. | pitch of a roof | d. | board feet calculation |

ANS: B PTS: 1

 233. The slope of a roof equals:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | the span of a building | c. | rise/run |
| b. | the run of a building | d. | rise/span |

ANS: C PTS: 1

 234. The pitch of a roof equals:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | the span of a building | c. | rise/run |
| b. | the run of a building | d. | rise/span |

ANS: D PTS: 1

 235. What is the pitch of a 6 in 12 roof?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1/3 | c. | 1/2 |
| b. | 1/4 | d. | 1/6 |

ANS: B PTS: 1

 236. What is the pitch of a 8 in 12 roof?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1/3 | c. | 1/2 |
| b. | 1/4 | d. | 1/6 |

ANS: A PTS: 1

 237. What is the pitch of a 4 in 12 roof?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1/3 | c. | 1/2 |
| b. | 1/4 | d. | 1/6 |

ANS: D PTS: 1

 238. The length of the rafter from the center of the ridge to outside edge of the wall is called the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | slope | c. | line length |
| b. | pitch | d. | overall length |

ANS: C PTS: 1

 239. The length of the rafter from the center of the ridge to outside edge of the wall plus the overhang is called the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | pitch | c. | line length |
| b. | slope | d. | overall length |

ANS: D PTS: 1

 240. A notch cut on the underside of a rafter to fit the top plate. This cut is formed by a seat cut and a plumb cut.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | groove | c. | plate cut |
| b. | dado | d. | bird’s mouth |

ANS: D PTS: 1

 241. When making stick rafters, each one should be shortened at the ridge \_\_\_\_\_\_\_\_ the thickness of the ridge board.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 3 times | c. | half |
| b. | 1/4 | d. | twice |

ANS: C PTS: 1

 242. Which square has a rafter table located on it?

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

ANS: B PTS: 1

 243. If the pitch of a roof is 1/4, what is the rise if the span is 40 feet?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 120 inches | c. | 10 feet |
| b. | 12 inches | d. | 120 feet |

ANS: A PTS: 1

 244. If the pitch of a roof is 1/3, what is the rise if the span is 20 feet?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 30 inches | c. | 80 inches |
| b. | 60 inches | d. | 80 feet |

ANS: C PTS: 1

 245. If the pitch of a roof is 1/6, what is the rise if the span is 50 feet?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 300 inches | c. | 100 feet |
| b. | 10 feet | d. | 100 inches |

ANS: D PTS: 1

 246. The lowest member of a truss is called the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | bottom chord | c. | girder |
| b. | bottom tail | d. | valley |

ANS: A PTS: 1

 247. A panel or bracket of either wood or metal attached to the corners and intersections of each member of a truss to add strength and stiffness is called a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | girder | c. | fascia |
| b. | gusset | d. | soffit |

ANS: B PTS: 1

 248. The correct stud spacing for walls is:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 12 O.C. | c. | 18 O.C. |
| b. | 16 O.C. | d. | 24 O.C. |

ANS: B PTS: 1

 249. The correct floor joist spacing is:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 12 O.C. | c. | 18 O.C. |
| b. | 16 O.C. | d. | 24 O.C. |

ANS: B PTS: 1

 250. Temporary framework used to assist in locating corners when laying out a foundation is known as:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | foundation corners | c. | batter boards  |
| b. | foundation benchmarks | d. | corner boards |

ANS: C PTS: 1