**Ag Construction & Maintenance CDE 1**

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

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

ANS: B PTS: 1

 6. 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

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

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

ANS: D PTS: 1

 8. 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

 9. 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

 10. 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

 11. 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

 12. 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

 13. Most residential wiring is made of a material called

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

ANS: A PTS: 1

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

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

ANS: B PTS: 1

 15. AWG stands for

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

ANS: A PTS: 1

 16. 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

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

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

ANS: D PTS: 1

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

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

ANS: A PTS: 1

 19. 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

 20. 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

 21. 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

 22. Type NM cable stands for:

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

ANS: A PTS: 1

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

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

ANS: B PTS: 1

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

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

ANS: C PTS: 1

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

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

ANS: A PTS: 1

 26. 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

 27. 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

 28. 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

 29. 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

 30. 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

 31. 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

 32. 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

 33. 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

 34. 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

 35. 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

 36. 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

 37. 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

 38. 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

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

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

ANS: B PTS: 1

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

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

ANS: D PTS: 1

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

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

ANS: C PTS: 1

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

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

ANS: D PTS: 1

 43. One thousandth of an ampere can also be called

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

ANS: B PTS: 1

 44. 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

 45. 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

 46. 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

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

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

ANS: C PTS: 1

 48. AC stands for:

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

ANS: B PTS: 1

 49. DC stands for:

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

ANS: A PTS: 1

 50. 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

 51. The electrical symbol “S” represents a:

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

ANS: A PTS: 1

 52. 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

 53. 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

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

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

ANS: B PTS: 1

 55. 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

 56. 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

 57. PVC stands for:

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

ANS: C PTS: 1

 58. CPVC stands for:

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

ANS: D PTS: 1

 59. PE pipe stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | polyethylene | c. | pipe extension |
| b. | polyevergreen | d. | pipe elbow |

ANS: A PTS: 1

 60. ABS pipe stands for:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Acrylonitrile Black Sleeve | c. | Acrylonitrile Butadiene Solder |
| b. | Acrylonitrile Brass Sleeve | d. | Acrylonitrile Butadiene Styrene |

ANS: D PTS: 1

 61. PEX pipe stands for:

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

ANS: A PTS: 1

 62. In plumbing, ID stands for:

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

ANS: C PTS: 1

 63. In plumbing, OD stands for:

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

ANS: C PTS: 1

 64. 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

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

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

ANS: A PTS: 1

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

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

ANS: C PTS: 1

 67. 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

 68. 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

 69. Which of the following types of pipe does not require glue to be used?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | PVC | c. | PE |
| b. | CPVC | d. | ABS |

ANS: C PTS: 1

 70. Which of the following types of pipe is black in color:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | ABS | c. | PEX |
| b. | galvanized | d. | PVC |

ANS: A PTS: 1

 71. Which of the following types of pipe would require soldering?

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

ANS: D PTS: 1

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

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

ANS: C PTS: 1

 73. Which of the following types of pipe can use compression fittings?

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

ANS: C PTS: 1

 74. 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

 75. 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

 76. 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

 77. A bushing used on copper tubing for sealing a compression fitting is called a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | rim | c. | flange  |
| b. | ferrule | d. | sleeve |

ANS: B PTS: 1

 78. 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

 79. 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

 80. 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

 81. 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

 82. 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

 83. 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

 84. 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

 85. 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

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

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

ANS: D PTS: 1

 87. 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

 88. Which type tool is used when making a bell shape on the end of copper tubing?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | flaring tool | c. | flange tool |
| b. | bell tool | d. | needle nose pliers |

ANS: A PTS: 1

 89. 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

 90. 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

 91. 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

 92. 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

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

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

ANS: B PTS: 1

 94. Roof \_\_\_\_\_\_\_\_ are placed around stacks where they pass through a roof.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | clamps | c. | collars |
| b. | flanges | d. | coverings |

ANS: B PTS: 1

 95. 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

 96. A plumbing fitting installed in the drain system to prevent sewer gases from entering the building is called a:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | check valve | c. | trap |
| b. | meter | d. | blockage |

ANS: C PTS: 1

 97. 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

 98. 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

 99. 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

 100. 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

 101. 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

 102. How long is a 20d nail?

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

ANS: C PTS: 1

 103. How long is a 16d nail?

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

ANS: B PTS: 1

 104. How long is a 10d nail?

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

ANS: D PTS: 1

 105. How long is a 8d nail?

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

ANS: C PTS: 1

 106. 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

 107. Which type nail has two heads?

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

ANS: B PTS: 1

 108. 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

 109. Which screw is bigger?

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

ANS: D PTS: 1

 110. 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

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

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

ANS: C PTS: 1

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

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

ANS: A PTS: 1

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

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

ANS: A PTS: 1

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

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

ANS: C PTS: 1

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

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

ANS: B PTS: 1

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

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

ANS: C PTS: 1

 117. 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

 118. 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

 119. 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

 120. 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

 121. 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

 122. 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

 123. 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

 124. Which word describes something that is exactly horizontal?

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

ANS: D PTS: 1

 125. 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

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

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

ANS: B PTS: 1

 127. 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

 128. 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

 129. 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

 130. The studs that are positioned above a header or below a window sill are called:

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

ANS: B PTS: 1

 131. 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

 132. OSB stands for:

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

ANS: A PTS: 1

 133. 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

 134. When studs are placed 16 inch 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

 135. 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

 136. 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

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

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

ANS: C PTS: 1

 138. 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

 139. 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

 140. 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

 141. The cut that is made in a piece of wood with a saw is called a:

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

ANS: B PTS: 1

 142. Pieces of 2X4 placed horizontally between each pair of studes are used to:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | brace the frame. | c. | provide nailers. |
| b. | retard the spread of fire. | d. | provide a place to stand while working. |

ANS: B PTS: 1

 143. The purpose in pre-punched holes in steel studs is to:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | make them lighter. | c. | provide runs for piping and wiring. |
| b. | save material. | d. | make it easier to attach drywall. |

ANS: C PTS: 1

 144. Steel studs are attached to the bottom channel using:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | self-tapping metal screws. | c. | powder actuated fasteners. |
| b. | wood screws. | d. | construction adhesive. |

ANS: A PTS: 1

 145. The concrete construction method in which the wall sections of a building are cast horizontally on the job site and lifted into position with a crane is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Concrete Framing | c. | Crane Construction |
| b. | Tilt-up Concrete Construction | d. | Pre-Cast Platform Building |

ANS: C PTS: 1

 146. The term for the path available for a person to leave a building is:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | access | c. | egress |
| b. | exit | d. | passage |

ANS: C PTS: 1

 147. The tapered pieces of wood used to install a door level and plumb so that it functions properly are called:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | spacers | c. | stakes |
| b. | trimmers | d. | shims |

ANS: D PTS: 1