When you have completed your exam and reviewed your answers, click Submit Exam. Answers will not be recorded until you hit Submit Exam. If you need to exit before completing the exam, click Cancel Exam.

Questions 1 to 20: Select the best answer to each question. Note that a question and its answers may be split across a page break, so be sure that you have seen the entire question and all the answers before choosing an answer.

1. Two electricians are discussing OCPDs. Electrician A says that clothes closets are ideal locations for panelboards with circuit breakers because it hides them from view of nonoccupants. Electrician B says bathrooms are a preferred location for the panelboard so that they conform to ready access requirements. Which of the following statements is correct?
   A. Both electricians are correct.
   B. Only Electrician A is correct.
   C. Neither electrician is correct.
   D. Only Electrician B is correct.

2. Two electricians are discussing voltage rating of circuit breakers. Electrician A says that a circuit breaker marked 120/240V is acceptable for a circuit that doesn't exceed 220 V between any two conductors. Electrician B says that a circuit breaker marked only 240 V wouldn't be acceptable in the same application. Which of the following statements is correct?
   A. Neither electrician is correct.
   B. Only Electrician A is correct.
   C. Both electricians are correct.
   D. Only Electrician B is correct.

3. When a small conductor such as 12 AWG copper is not a tap conductor or a transformer secondary conductor its overcurrent protection may not exceed
   A. 30.
   B. 20.
   C. 25.
   D. 15.

4. When making a load calculation, the NEC permits you to round to the nearest whole ampere, dropping decimal fractions smaller than
   A. 0.49.
   B. 0.50.
   C. 0.25.
   D. 0.75.

5. A clothes dryer in a one-family dwelling is rated at 6000 VA. What is the demand load on the line and the neutral?
A. 6000 VA line, 6000 VA neutral  
B. 6000 line, 4200 VA neutral  
C. 4200 VA line, 4200 VA neutral  
D. 4200 VA line, 6000 VA neutral

6. According to the NEC, ______ AWG is the minimum size for copper conductors in normal overhead and underground service. 
A. 10  
B. 8  
C. 6  
D. 12

7. Two electricians are discussing the outside wiring for a new home. Electrician A says that the drip loop must be moved because it doesn't fall below the service head. Electrician B says that an area where the service conductors are to be run must be moved, because although this area is three feet above the door, it won't be more than three feet above the window. Which of the following is correct? 
A. Neither electrician is correct.  
B. Only Electrician A is correct.  
C. Both electricians are correct.  
D. Only Electrician B is correct.

8. If a circuit contains portions of different ampacities, the higher ampacity is permitted to be used for the entire circuit if the lower-ampacity conductor runs for the lesser of 10-feet in length or ______ percent of the circuit length.  
A. 10  
B. 49  
C. 20  
D. 15

9. Which of the following is not considered service equipment? 
A. Meter socket enclosures  
B. Panelboards  
C. Circuit breakers  
D. Disconnecting means

10. A one-family dwelling contains the following 120 V appliances, fastened in place, supplied by the same feeder: food disposer—750 VA; dishwasher—1450 VA; trash compactor—900 VA; two attic fans—750 VA each; water heater—8000 VA. What is the fixed-appliance line load for this dwelling?  
A. 12,600 VA  
B. 9450 VA  
C. 8888 VA  
D. 7088 VA

11. Two electricians are discussing conductors. Electrician A says that the maximum rated voltage, the
conductor type, and the AWG size must be marked on a conductor. Electrician B says that copper-clad aluminum conductors will have a higher ampacity rating than an equal sized copper conductor. Which of the following statements is correct?
A. Neither electrician is correct.
B. Both electricians are correct.
C. Only Electrician A is correct.
D. Only Electrician B is correct.

12. The NEC requires that a fuse or an overcurrent trip unit of a circuit breaker be connected in series with each ungrounded
A. panel.
B. device.
C. conductor.
D. neutral.

13. The minimum size service disconnect for a single-family dwelling is
A. 100 A.
B. 200 A.
C. 150 A.
D. 60 A.

14. The NEC states that when a small conductor such as 12 AWG copper isn't considered to be either a tap conductor or a transformer secondary conductor, its overcurrent protection may not exceed _______ amperes.
A. 15
B. 30
C. 25
D. 20

15. Which of the following is not a standard ampere rating for a fuse according to the NEC?
A. 225A
B. 220A
C. 175A
D. 200A

16. You're evaluating the components of a multi occupancy building that won't have an on-site employee. To be compliant with the NEC, each occupant will need to have access to their own
A. emergency fire water-pump disconnect.
B. service conductor.
C. cable attachment point.
D. service disconnecting means.

17. For installations consisting of not more than one 2-wire branch circuit, the NEC requires that the service disconnecting means shall have a rating of not less than _____ amperes.
18. When calculating demand load for a single-family residence which of the following is a true statement concerning heating and air conditioning units?
A. The larger load of the two is included in the calculations.
B. Neither heating nor air conditioning units are included in the calculations.
C. Both heating and air conditioning units are included in the calculations.
D. The smaller load of the two is included in the calculations.

19. Two electricians are discussing circuit breakers used as switches. Electrician A says that circuit breakers used as switches in a 120 V circuit need to be marked SWD or HID. Electrician B says the HID marking is required for high-intensity lighting. Which of the following statements is correct?
A. Both electricians are correct.
B. Only Electrician A is correct.
C. Neither electrician is correct.
D. Only Electrician B is correct.

20. Two electricians are discussing Edison-Base fuses. Electrician A says that he plans to install them in a new building where no circuit is over 125 volts or 30 amperes. Electrician B says that when replacing an existing installation, you must check for tampering. Which of the following statements is correct?
A. Both electricians are correct.
B. Only Electrician B is correct.
C. Only Electrician A is correct.
D. Neither electrician is correct.