Pennsylvania Mining Law
Questions and Answers

Section 301

1. Medium voltage is _____.

    a. 300 to 660 volts
    b. 240 to 480 volts
    c. 661 to 1,000 volts
    d. 110 to 220

2. The connection point of transformer or generator winds from which the voltage to ground is normally zero and is the point generally used for system grounding in a Y-connection AC power system is known as _____.

    a. neutral point
    b. neutral
    c. ground
    d. none of the above

Section 302

3. All electric equipment and circuits that pertain to the operation of the mine are under the control of:

    a. mine management
    b. mine foreman
    c. MSHA
    d. DEP

4. Electrical face equipment, mobile or portable mine machinery having electrical motors or Accessory equipment normally installed or operated in _____.

    a. on the haulage
    b. last open crosscut in any entry or room
    c. outby
    d. in the bathhouse

Section 302

5. Higher than _____ volts is high voltage.

a. 12 volts
b. 120 volts
c. 480 volts
d. 1,000 volts

6. Low voltage is up to _____ volts.

a. 1,000 volts
b. 12,470 volts
c. 7,200 volts
d. 660 volts

7. A cable designed for vertical suspension in a bore hole or shaft and is used for power circuits in the mine.

a. high voltage cable
b. trailing cable
c. armored cable
d. bore-hole cable

8. A tap taken off a main circuit is _____.

a. electric system
b. branch circuit
c. neutral point
d. primary ground

Section 227

9. How many number of approved gas detection devices shall be kept in good condition, in case of emergency?

a. 25
b. 50
c. ½ shift
d. sufficient amount

Section 278

10. What type of crime is committed when an individual enters a mine without authorization from the superintendent?

a. 1st degree felony
b. 2nd degree misdemeanor
c. 3rd degree misdemeanor
d. 2nd degree felony

Section 280

11. When filling an abandoned shaft, what thickness of incombustible fill should extend from the bottom of the coal seam upwards?

a. 100 feet
b. 300 feet
c. the entire length
d. 50 feet

12. How often should chemical fire extinguishers be examined?

a. monthly
b. every 3 months
c. every 6 months
d. annually

13. Foam generating systems should be-capable of producing and delivering how much foam in 5 minutes?

a. enough to envelope the entire entry
b. enough until the fire is extinguished
c. no set amount
d. an amount that fully envelope the belt drive, belt takeup, electrical controls, gear reducing link, and conveyor belt for a distance of 50 feet

14. At each wooden door through which power lines pass, there shall be 1 portable fire extinguisher or 240 pounds of rock dust within _____ feet of the door on the intake air side.

a. 100 feet
b. 50 feet
c. 30 feet
d. 25 feet

Section 280

15. At a mine producing 300 tons of coal or more per shift, there shall be ready and available fighting equipment at locations, not exceeding _____ miles of each working section.

a. 4 miles
b. 2 miles
c. 3 miles
d. 1 mile

Section 273

16. Each track or off-track locomotive, self-propelled mantrip car or personnel carrier, shall be equipped with 1 portable fire extinguisher.

a. true
b. false

17. One portable fire extinguisher and 240 pounds of rock dust shall be provided at each _____.

a. belt drive
b. tail piece
c. take up
d. temporary electrical installation

18. Water lines shall be installed parallel to the entire length of a belt equipped with fire outlet valves. How many feet intervals are they to be installed?

a. 200 ft.
b. 100 ft.
c. 300 ft.
d. 400 ft.

19. At least _____ feet of fire hose with fittings suitable for connection with each belt conveyor water line system is required.

a. 50 ft
b. 100 ft.
c. 500 ft.
d. 300 ft.

Section 271

20. Mechanically operated grinding wheels shall be equipped with safety washers and substantial retaining hoods covering _____ of the circumference of the wheel.

a. 1/3
b. 2/3
c. 3/4
d. the entire circumference

21. Where stationery grinders are used, a tool rest shall be provided in the clearance between the wheel and the tool rest shall not exceed _____ of an inch.

a. 3/4
b. 1/2
c. 1/32
d. 1/4

Section 269

22. Equipment operators shall exercise reasonable care in the operation of the equipment entrusted to them. They shall promptly report _____.

a. to work
b. defects known to them
c. people sleeping
d. any problems

Section 271

23. Guarding belt chain or rope drives, and the moving parts of machinery which are within _____ feet of the floor, ground, or platform level, unless isolated, shall be guarded adequately.

a. 5
b. 7
c. 3
d. 10

Section 273

24. Backup water system - one firehose outlet together with a length of hose capable of extending to the belt drive shall be provided within _____ feet of each belt drive.

a. 100
b. 200
c. 300
d. 500

25. Each water sprinkler system shall be examined _____ and a functional test of the complete system shall be conducted _____ each year.

a. weekly - once
b. monthly - once
c. annually - twice
d. weekly - weekly

Section 274

26. Stairways located in shafts less than 100 feet in depth, shall be fitted with steps that have an average tread of _____.

a. 8 inches
b. 12 inches
c. 10 inches
d. 14 inches

27. In every slope with workings on both sides, an overpass or underpass, not less than _____ shall be provided as a passageway to cross from one side to the other.

a. 5 ft. high and 4 ft. wide
b. 4 ft. high and 5 ft. wide
c. 4 ft. high and 4 ft. wide
d. 5 ft. high and 5 ft. wide

28. Employees shall be lowered into or hoisted from the mine at a speed not to. exceed _____ M.P.H.

a. 2 mph
b. 4 mph
c. 6 mph
d. 8 mph

Section 274

29. Each self-contained dry powder system shall be equipped with hose or pipelines which are no longer than _____.

a. 100 ft.
b. 300 ft.
c. 500 ft.
d. necessary

30. Each dry powder chemical system shall contain the minimum of _____ pounds of dry powder for fire resistant belts.

a. 150
b. 140
c. 125
d. 135

31. The nozzles of each dry powder chemical system shall be capable of discharging all powder within _____ minutes.

a. 5
b. 2
c. 1
d. 4

Section 274

32. The distance between shafts shall be no less than _____ feet.

a. 100
b. 200
c. 500
d. 1000

33. Every mine shall have no fewer than _____ main entries connected to openings or outlets to the surface.

a. 5
b. 10
c. 15
d. 1

Section 273

34. At what temperature do water sprinklers turn on?

a. 150 degrees Fahrenheit
b. 200 degrees Fahrenheit
c. 250 degrees Fahrenheit
d. 275 degrees Fahrenheit

Section 276

35. How many days supply of oil may be stored in the mine outside a fireproof structure?

a. 1 week
b. 2 days
c. 1 day
d. 3 days

Section 277

36. Care for gas detection devices are the responsibility of the _____.

a. shift foreman
b. superintendent
c. mine foreman
d. lamp man

Section 273

37. Water, powder, and chemicals required, shall be adequate to maintain water of foam flow for no less than _____ minutes.

a. 30
b. 20
c. 15
d. 25

Section 273

38. In the National Fire Protections Association entitled “Installation of sprinkler systems” – what is the code number?

a. 14
b. 12
c. 5
d. 13

Section 266

39. All personnel shall wear protective _____ while underground and while on the surface where falling objects may cause injury.

a. snug fitting clothing
b. reflective vest
c. hard hats
d. self rescuer

40. Employees engaged in haulage operations and all other individuals employed around moving equipment on the surface and underground shall wear _____.

a. boots
b. gloves
c. cap lamps
d. snug fitting clothing

Section 267

41. In all mines, the _____ may search or cause to be searched, any individual or his belongings entering, or about to enter the mine, to prevent said individual from carrying any prohibited material into the mine.

a. lamp man
b. safety department
c. operator
d. shift foreman

Section 264

42. Torches can be lit by the use of _____.

a. hot metal
b. spark lighter
c. matches
d. permissible cigarette lighter

43. Oxygen and gas tanks, when not in use, shall be stored _____ on a section.

a. inby the last open crosscut, as long as it has been examined
b. outby the last open crosscut
c. on the wide side of the entry when the miner operator can see it
d. inby the last open crosscut, as long as no equipment is energized

Section 264

44. When cutting or welding in a dry area of the mine, a _____ and _____ shall be available at the site.

a. fire extinguisher and rock dust
b. rock dust and fire hose
c. fire hose
d. none of the above

45. Cutting, burning or welding shall be done in _____ air only?

a. fresh
b. return
c. cold
d. intake

Section 263

46. Not more than a _____ supply of oxygen or gas shall be stored in any underground or surface shop?

a. 1 shift
b. 2 week
c. 24 hours
d. 1 week

Section 263

47. When are valves and hoses allowed to remain attached to oxygen and gas cylinders in underground and surface structures?

a. marked empty
b. on a storage rack
c. ventilated and property protected
d. secured to the rib

Section 250

48. What are some of the duties of a bottom person?

a. attend to the signals
b. do not allow tools on the hoist with personnel
c. be on duty at start and end of shift
d. search personnel for smoking materials

49. At what age does one qualify to become a bottom person?

a. 18
b. 25
c. 21
d. 20

Section 249

50. How many signals are given to hoist personnel?

a. 1
b. 2
c. 3
d. 4

51. In shafts used exclusively for lowering or hoisting individuals and materials, the factor of safety of ropes, links, and chains, shall not be less than _____ of the maximum load.

a. 5 to 1
b. 10 to 1
c. 20 to 1
d. 15 to 1

Section 249

52. All ropes, links and chains shall be carefully examined at least once every hours by a competent individual.

a. 8 hrs.
b. 12 hrs.
c. 24 hrs.
d. 72 hrs.

53. How fast can a cage or elevator be lifted or lowered with personnel aboard?

a. 500 ft. per minute
b. 600 ft. per minute
c. 800 ft. per minute
d. 900 ft. per minute

54. No empty or loaded mine cars can be hoisted or lowered with personnel.

a. true
b. false

Section 246

55. Explosives or detonators shall not be hauled into or out of a mine within _____ minutes proceeding or following personnel carriers.

a. 5 minutes
b. 20 minutes
c. 10 minutes
d. 30 minutes

56. Neither explosives or detonators shall be transported on flight or shaking conveyors, mechanical loading machines, locomotives, cutting machines, drill trucks, or any _____.

a. man-trips
b. busses
c. scoops
d. self-propelled mobile equipment

Section 259

57. Conveyors shall be equipped with an automatic control that will stop the driving motor in case of slippage on the drive pulley, and the control shall be tested _____ to determine that it is in good working condition.

a. continuously
b. each operating shift
c. daily
d. weekly

Section 259

58. Control lines shall be installed _____.

a. at the belt drive
b. in areas when people are working
c. the full length of the belt
d. at the tail roller

Section 258

59. Who governs the speed of a man trip?

a. state inspector
b. shift foreman
c. superintendent
d. mine foreman

60. Where transportation of personnel is done exclusively by rail, the track shall be maintained to within _____ feet of the tail piece on the long wall.

a. 750 feet
b. 1000 feet
c. 1500 feet
d. 600 feet