

EXCAVATION
RV. 8.25.09

This is an Illustrated Course.

- 1. Download Quizzes** – Open – Print.
- 2. Login** to your account using your ID and password.
- 3. Start viewing** the course, one web page at a time.
4. The answers to the quiz questions are found on the course web pages.



5: Circle the correct answers on your printed copy of the quizzes as you study the course web pages.

Quiz questions track the web pages as you view them.

6. Refer to your printed quizzes to find the correct answers to each of the on-line quiz questions.

You will notice that the questions are exactly the same as your printed ones
This is just like an open book test.

Quiz 1

Question 1: Most accidents occur in trenches that are:
1 to 4 ft. deep
5-15 ft. deep
15-20 ft. deep
20 ft. and deeper
all of the above

Question 2: _____% of people covered by dirt in a cave-in will die.
20
30
40
50
90

Question 3: The federal laws that regulate excavation procedures are under the following jurisdiction:
OSHA
FEMA
Department of the Interior
US Health Department
Mine Safety Task Force

Question 4: By definition, a trench has a width less than _____ feet.
3
6
12
15
20

Question 5: Most soils weigh about _____ pounds per cubic yard.
1000
2000
3000
4000
5000

Question 6: Soil consists of the following major parts EXCEPT:
pebbles
sand
clay
silt

Question 7: TYPE A soil has an unconfined compressive strength of

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greater than 1.5 tons per square foot.
greater than 0.5 and less than 1.5 tons per square foot.
greater than 0.1 and less than 0.5 tons per square foot.
a least 1750 Torvanes

Question 8: Type A soil (check all that apply)
may be fissured
may be subject to vibration
may be previously disturbed
may have water present
none of the above

Question 9: Type B soil has an unconfined compressive strength of:
greater than 1.5 tons per square foot.
greater than 0.5 and less than 1.5 tons per square foot.
between 0.1 and 0.5 tone per square foot.
at least 1750 Torvanes.
at least 2.1 on the Richter Scale

Question 10: Type C soil is the most cohesive soil.
True
False

Question 11: The person on the job site who is responsible for soil testing is called:
the responsible person
an idiot
the competent person
the incompetent person

Question 12: During a visual test, which of the following is NOT done?
check for tension cracks.
check for previously disturbed soil.
check for indications of layered geologic structuring.
perform a sedimentation test.

Question 13: Which of the following is a manual soil test?
thumb penetration
pocket penetrometers
sedimentation
all of the above

Question 14: A penetration of 1/4" would indicate
solid rock
Type A
Type B
Type C
Type D

Question 15: Following a brief rainstorm, the soil must be retested.
True
False

Question 16: To accurately determine the amount of silt in soil, the following test should be used:
thumb penetration
pocket penetrometer
sedimentation
wet thread test
ribbon test

Quiz 2

Question 1: Cave-ins usually give a warning prior to happening.
True
False

Question 2: Typical soil that is 5 feet in height will exert approximately _____ pounds per square foot in a sideways direction at the base of the soil.
100
150
200
250
500

Question 3: Which of the following is a standard description of a cave-in?
Sliding
Toppling
Subsidence and Bulging
Boiling
all of the above

Question 4: Which is/are the most common reason(s) for a trench collapse?
moisture of the soil, too much or too little
soil previously disturbed
soil has repeated freezing and thawing
all of the above

Quiz 3

Question 1: Generally, excavations less than _____ feet in depth do not required a protective system.
4
5
6
8
none of the above

Question 2: Which of the following is a method for excavation protection?
sloping
benching

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shoring
trench shield
all of the above

Question 3: Type C soil may have a slope not to exceed _____ degrees.

53
45
34
22 1/2
15

Question 4: Benching is NOT allowed for which of the following types of soil?

Type A
Type B
Type C
Type D
all of the above

Question 5: Spoils shall be placed not closer than _____ ft from the edge of the excavation

1
2
3
4
none of the above

Question 6: Currently, a popular method of shoring is:

hydraulic
timber
whaler
screw jack
Diana Shore

Question 7: A support or shield should extend a minimum of _____ inches above the surrounding soil.

12
16
18
24
36

Question 8: The maximum depth an excavation can be dug without a professional engineer designing the system is:

10 ft.
15 ft.
20 ft.
25 ft.
no limits.

Question 9: A trench shield be stacked on one another.
yes, always

yes, but only if it is designed for "double stacking"
yes, if the competent person says so
no, never allowed
no, the shield can never be greater than 8 feet in depth

Quiz 4

Question 1: The major problem with water in a trench is:

that the soil quickly loses structural strength.
the workers cannot clearly see the bottom of the trench and may slip.
the workers can drown in deep water.
boots and clothes become wet and increase the chance of pneumonia
electrical shock hazard is increased.

Question 2: Prior to entering a trench, which of the following should be tested?

oxygen level
combustible gas
hazardous substances
all of the above

Question 3: A ladder, stairway or ramp is needed if the excavation is more than _____ feet in depth.

3
4
5
6
8

Question 4: The ladders shall be spaced so that a worker does not need to travel more than _____ feet lateral distance.

10
15
20
25
50

Question 5: The ladder shall extend _____ ft above the edge of the trench.

1/2
1
2
3
4

Question 6: On the job site, employees should wear hard hats.

True
False

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Quiz 5.

Question 1: On a guard rail, the upper rail must be _____.

- between 42 to 45 inches.
- between 36 to 42 inches.
- between 36 to 48 inches.
- between 40 to 46 inches.