

Unit 10 - Week 8

Course outline

How does an NPTEL online course work?

Practice Assignment

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

● Lecture 33: Geomaterial characterization- IX (Chemical characterization)

● Lecture 34: Geomaterial characterization- X (Chemical characterization)

○ Lecture 35: Geomaterial characterization- XI (Chemical characterization)

● Lecture 36: Geomaterial characterization- XII (Corrosion potential of soils)

● Lecture 37: Soil characteristics & environmental variables

○ Download Videos

○ Weekly Feedback

○ Quiz : Assignment-8

● Assignment-8 solutions

Week 9

Week 10

Week 11

Week 12

Text Transcripts

Assignment-8

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-03-25, 23:59 IST.

1) Which of the following statement(s) is(are) incorrect? 0 points

- Pressure membrane extractors are used to measure pH of the pore-solution
- Pressure membrane extractors are used for collection of pore-solution
- Pressure membrane extraction works on the principle of Boyle's law
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Pressure membrane extraction works on the principle of Boyle's law

2) Which of the following devices can be used for pore solution sampling? 1 point

- Pressure membrane extractor
- Lysimeter
- Both (a) and (b)
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Both (a) and (b)

3) Which of the following is an indirect technique to establish chemical characteristics of geomaterials? 2 points

- Impedance spectroscopy
- Atomic absorption spectroscopy
- Time-domain reflectometry
- pH probe

No, the answer is incorrect.
Score: 0

Accepted Answers:
Impedance spectroscopy
Time-domain reflectometry

4) Presence of _____ will increase the soil salinity 2 points

- Oxides
- Nitrates
- Chlorides
- Sulphates

No, the answer is incorrect.
Score: 0

Accepted Answers:
Chlorides
Sulphates

5) Suction is directly proportional to moisture content. 1 point

- True
- False

No, the answer is incorrect.
Score: 0

Accepted Answers:
False

6) Matrix suction of an uncontaminated soil is always less than total suction 1 point

- True
- False

No, the answer is incorrect.
Score: 0

Accepted Answers:
False

7) Osmotic suction of soils is mainly due to the presence of _____ 1 point

- Contaminants
- Soil minerals
- Both (a) and (b)
- Moisture

No, the answer is incorrect.
Score: 0

Accepted Answers:
Contaminants

8) Which of the following decontamination techniques breaks the bonds between geomaterial and contaminants through oxidation? 1 point

- Phytoremediation
- Ion exchange
- Air purging
- Bioremediation

No, the answer is incorrect.
Score: 0

Accepted Answers:
Air purging

9) Which of the following states of the native soil might show high corrosivity ? 1 point

- Undisturbed soil
- Undisturbed contaminated
- Contaminated
- Contaminated soil with high aeration rate

No, the answer is incorrect.
Score: 0

Accepted Answers:
Contaminated soil with high aeration rate

10) _____ helps in identifying the corrosive property of water 1 point

- Refractive index
- Ryzner index
- Plasticity index
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Ryzner index