

Unit 14 - Week 12

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

Week 9

Week 10

Week 11

Week 12

Lecture 52: Electrical characterization- II

Lecture 53: Electrical characterization- III

Lecture 54: Magnetic characterization

Lecture 55: Pore-structure characterization- I

Lecture 56: Pore-structure characterization- II

Download Videos

Weekly Feedback

Quiz : Assignment-12

Assignment-12 solutions

Text Transcripts

Assignment-12

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

Due on 2020-04-22, 23:59 IST.

- 1) Electrical conduction in most of the saturated geomaterials is a result of _____ 1 point
- Movement of ions
 - Presence of hydroxyl ions
 - Reduction in porosity
 - All of the above

No, the answer is incorrect. Score: 0

Accepted Answers: Movement of ions

- 2) Presence of _____ in soils reduces the flow of AC through them, drastically 1 point
- Moisture
 - Contaminated water
 - Organic matter
 - All the above

No, the answer is incorrect. Score: 0

Accepted Answers: Organic matter

- 3) Magnetic characterization of geomaterials will be more comprehensive due to its ability to capture their _____ 1 point
- Dielectric response
 - presence of multi-phase
 - None of these
 - Both a and b

No, the answer is incorrect. Score: 0

Accepted Answers: Both a and b

- 4) Which of the following techniques is used for in-situ soil moisture measurement? 2 points
- Thermogravimetric
 - Calcium carbide
 - Time-domain reflectometry
 - IR moisture balance

No, the answer is incorrect. Score: 0

Accepted Answers: Calcium carbide

Time-domain reflectometry

- 5) MIP can't be used for estimating the volume of _____ pores 1 point
- Interconnected
 - Dead-end
 - Closed
 - Passing

No, the answer is incorrect. Score: 0

Accepted Answers: Closed

- 6) The main reason for utilization of mercury for MIP studies is _____ 1 point
- Higher specific gravity
 - Non- wetting nature
 - Liquid metal
 - All of the above

No, the answer is incorrect. Score: 0

Accepted Answers: Non- wetting nature

- 7) Which of the following material will consists of mesopores? 1 point
- Zeolites
 - Polymers
 - Silica fumes
 - Cement

No, the answer is incorrect. Score: 0

Accepted Answers: Polymers

- 8) The contact angle for a non-wetting fluid is always _____ 1 point
- $>90^\circ$
 - Equal to 90°
 - $<90^\circ$
 - Can't be said

No, the answer is incorrect. Score: 0

Accepted Answers: $>90^\circ$

- 9) Which of the following parameter(s) is(are) required to determine the pore-size? 1 point
- Surface tension
 - Contact angle
 - Applied pressure
 - All of the above

No, the answer is incorrect. Score: 0

Accepted Answers: All of the above