

# Unit 8 - Week 6

## Course outline

How does an NPTEL online course work?

### Practice Assignment

#### Week 1

#### Week 2

#### Week 3

#### Week 4

#### Week 5

#### Week 6

• Lecture 24: Application of industrial by-products- II

• Lecture 25: Geomaterial characterization-I (Mineralogical characterization)

• Lecture 26: Geomaterial characterization-II (Mineralogical characterization)

• Lecture 27: Geomaterial characterization-III (Morphological characterization)

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○ **Quiz : Assignment-6**

○ Assignment-6 solutions

#### Week 7

#### Week 8

#### Week 9

#### Week 10

#### Week 11

#### Week 12

### Text Transcripts

## Assignment-6

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

**Due on 2020-03-11, 23:59 IST.**

Hint:

Que3: '^' means "to the power"

Que 7: "Theta" means angle of incidence

1) Dredging activity is required for \_\_\_\_\_

2 points

- Maintenance of navigation channels  
 Removal of organic matter from sediments  
 Beach nourishment  
 All the above

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Maintenance of navigation channels  
Beach nourishment

2) Which of the following IBPs would consists of organic carbon in it?

2 points

- Fly ash  
 Steel slag  
 Waste glass  
 Dredged sediments

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Fly ash  
Dredged sediments

3) \_\_\_\_\_ are the units of collapse potential

1 point

- mm/sec  
 m<sup>2</sup>/sec  
 m<sup>3</sup>/m<sup>2</sup>/sec  
 No units

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
No units

4) What is the initial void ratio of a sandy soil deposit with a collapse potential of 0.11 and a final void ratio of 0.80?

1 point

- 1.002  
 1.02  
 1.29  
 0.98

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
1.02

5) Sands are more prone to collapse as compared to clays.

1 point

- Yes  
 No

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Yes

6) The patterns used for the analysis of XRD information are known as \_\_\_\_\_

1 point

- Micrograph  
 Diffractogram  
 Photograph  
 None of the above

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Diffractogram

7) Which of the following statements are not true in the context of XRD analysis?

2 points

- XRD works on the principle of Beer-Lambert law  
 XRD is not an appropriate technique to identify the amorphous phase  
 The diffraction pattern is unique to a specific mineral  
  $n\lambda = 2D \sin(\theta)$ , where the symbols have their specific connotation

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
XRD works on the principle of Beer-Lambert law  
 $n\lambda = 2D \sin(\theta)$ , where the symbols have their specific connotation