NPTEL » Environmental Soil Chemistry

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Unit 13 - Week 11
  Course outline
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  course work?
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   Lecture 52: Modeling the Fate
     of Pollutants in Soil, Risk and
     Remedies (Contd.)

    Lecture 53: Modeling the Fate

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    Lecture 54: Modeling the Fate

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    Lecture Material For Week 11

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Assignment Detailed Solution

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Assignment 11
                                                                                              Due on 2020-12-02, 23:59 IST.
The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.
                                    phenomenon.
1) Retention is a _____
                                                                                                                         1 point
               a. Source
               b. Irreversible
               c. Sink
               d. Transformation from solid to liquid
 ○ c.
No, the answer is incorrect.
Score: 0
Accepted Answers:
                                                                                                                         1 point
2) Preferential flow is ____
                                     flow.
       a. Uneven
       b. Very slow
       c. Even
       d. None of these
 ○ c.
 d.
No, the answer is incorrect.
Score: 0
 Accepted Answers:
3) How chemicals are introduced to natural media?
                                                                                                                         1 point
               a. Industrial operations
                b. Using of agricultural chemicals
               c. Waste disposal
               d. All of these
 ○ a.
 O c.
No, the answer is incorrect.
Score: 0
Accepted Answers:
                                                                                                                         1 point
4) How many types of pollution models can be found?
            a. 1
            b. 2
            c. 3
            d. 4
 ○ a.
 ○ c.
No, the answer is incorrect. Score: 0
Accepted Answers:
5)
                                                                                                                         1 point
                           model is useful for testing various hypothesis in relation to mechanisms
    of retention, transformation and transport.
                a. Research model
                b. Management model
                c. Screening model
                d. Teaching model
No, the answer is incorrect. Score: 0
Accepted Answers:
6) In a one -dimensional CD equation, Θ indicates ______.
                                                                                                                         1 point
            a. Flow of temperature
            b. Volume
            c. Volumetric soil content
           d. Volumetric water content
No, the answer is incorrect.
Accepted Answers:
7) Monte Carlo simulations are used in - .
                                                                                                                         1 point
               a. Deterministic model
               b. Stochastic model
               c. Both of them
               d. None of these
No, the answer is incorrect.
 Score: 0
Accepted Answers:
                                                                                                                         1 point
8) The variability of measured values in a pollution model has _____ components.
        d. 2
No, the answer is incorrect.
Accepted Answers:
9) For soil pollution model validation, the input parameters can be obtained by -
                                                                                                                         1 point
        a. Calibration
        b. Published values
        c. Pedotransfer functions
        d. All of these
No, the answer is incorrect.
Accepted Answers:
10) Which statistical criteria is not used in model validation?
                                                                                                                         1 point
        a. Coefficient of determination
        b. Coefficient of residual mass
        c. Geometric mean
        d. Maximum error
No, the answer is incorrect.
 Score: 0
Accepted Answers:
11) Which criteria is used by the model users to judge the model validation?
                                                                                                                        1 point
        a. Available data
        b. Type of the model
        c. The problem under consideration
        d. All of the above
No, the answer is incorrect.
Score: 0
Accepted Answers:
12) Soil remediation is not needed when -
                                                                                                                         1 point
        a. Toxic elements are present in the soil
        b. There is no risk to bio-diversity
        c. There is no risk to human health
        d. Both b and c
No, the answer is incorrect.
Score: 0
Accepted Answers:
                                                                                                                         1 point
13) Diagnosis of the soil pollutants means-
        a. Pollution remediation
        b. The prediction of future pollution
        c. The characterization of the pollutants at the present time considering the hydrologic,
           pedologic and geologic characteristics of the site.
        d. None of these
  ○ d.
No, the answer is incorrect.
Accepted Answers:
                                                                                                                         1 point
14) The risk assessment of the pollutant is based on -
        a. Physicochemical state of the pollutant
        b. The location of the pollutants
        c. Transformation of the pollutants
        d. All of these
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No, the answer is incorrect. Score: 0

15) The choice of remedial treatment should be based on:

c. The risk assessment before, during and after the remediation

a. The end use of the land

d. All of these

No, the answer is incorrect.

Accepted Answers:

Score: 0

b. The costs of remediation

1 point

Accepted Answers: