Assignment-8

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

1) Hydraulic conductivity of the unsaturated soils is less as compared to fully saturated soils.
   - True
   - False

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   None

2) _______ mechanism(s) in the porous media avoid the concentration of contaminant at any time becoming equal to initial concentration.
   - Adsorption
   - Sorption
   - Dispersion
   - Diffusion

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   None

3) Identify the dimensions of the diffusion coefficient.
   (Note: ** is power symbol)
   - $M^0 L^0 T^{-1}$
   - $M^1 L^{-2} T^{-1}$
   - $M^1 L^1 T^{-1}$
   - $M^1 L^2 T^{-1}$

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   None

4) _______ govern(s) the contaminant transport through a porous media
   - Fick’s first law
   - Fick’s second law
   - Fourier’s first law
   - Laplace’s law

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   None

5) Which of the following parameters affect the dispersion of contaminant in the soil matrix?
   - Porosity
   - Grain size
   - Grain length
   - Tortuosity
   - All of the above

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   None

6) Which parameter appears in the advection-diffusion equation?
   - Retention capacity
   - Tortuosity factor
   - Peclet number
   - None of the above

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   None

7) Which of the following parameters influence the distribution coefficient?
   - The octanol-water partition coefficient
   - pH
   - The specific surface area of the soil
   - All of the above

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   None

8) Which of the following terms has the same dimensions?
   - Diffusion coefficient
   - Velocity
   - Density
   - Kinematic viscosity

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   None

9) Adsorption is favoured by the high surface area of the adsorbents.
   - True
   - False

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   None