Questions Module 5

HEALTH AND RISK

Mark the correct alternative in yellow. Note that the correct answers can be 1 or up to all 4 alternatives.

1. The energy barrier for viruses will decrease with?
a. High rainfall
b. Low rainfall
c. Low salt content in the water phase
d. High salt content in the water phase

2. Straining happens when?
a. When the ratio between particle size of the microorganizm to the particle size of the porous media is dp/dc > 0,05 (dp=particle size, dc sand grain size)
b. Particle size is larger than the pore size of the porous media
c. The porous media is unsaturated
d. The porous media is water saturated

3. How can viruses most likely be eliminated or deactivated when flowing through porous media?
a. When exposed to air water interfaces
b. By sorption to charged surfaces
c. By radiation
d. By straining

4. Where is the highest inactivation of microorganizms occurring in an infiltration system?
a. In the groundwater zone
b. In the unsaturated zone
c. Just below the bottom of the infiltration trench
d. In the distribution layer of the trench

5. What is the effect of temperature on microbial inactivation?
a. More rapid inactivation by lower temperature
b. Complete elimination when freezing
c. More rapid inactivation when higher temperature
d. Temperature does not matter

6. What do you mean by Disability Adjusted Life Year (DALY) ?
a. Number of years spent without going to work

b. Years of life lost to premature death (YLL) + years lived with disability (YLD)
c. Total number of years spent in hospital bed
d. Number of years lived free of disability

7. Quantitative Microbial Risk Assessment is a process
a. To quantify the number of pathogens in the wastewater
b. To measure the efficiency of water and wastewater treatment plant to remove microbial agent removal
c. Of quantifying the probability of a harmful effect to individuals or populations from the exposure to the infectious agents.
d. Of evaluating health and hygiene programs

8. The probability of risk of infection depends upon
a. Amount of pathogens ingested
b. Frequency of exposure
c. Immune system of the individual exposed to hazardus event
d. All of the above

9. The pathognes that is most responsible to casuse diarrhoeal illnesses in children under 5 is :
a. Rotavirus
b. Norovirus
c. Vibrio cholerae
d. Tape worm