1. The hydrologic cycle describes:
   A. The movement of water through the environment.
   B. Condensation, runoff, evapotranspiration, precipitation, and infiltration.
   C. The water in various natural reservoirs.
   D. The water being exchanged in natural processes.
   E. All of the choices are correct.

2. Within a drainage system:
   A. Water all flows away from the largest channel.
   B. All runoff flows in only one channel.
   C. Water comes only from the same storm.
   D. All runoff drains into the same stream.
   E. All runoff infiltrates.

3. When a stream experiences an increase in gradient, it will:
   A. Flow faster and erode its channel.
   B. Develop a graded profile.
   C. Produce more flash floods.
   D. Erode all its alluvial fans.
   E. Form a delta.

4. Why is clay difficult to erode but easy to transport?
   A. Because the particles are so heavy.
   B. Because the particles stick to the channel bed and then exhibit saltation.
   C. Actually, clay is easy to erode.
   D. Because clay sticks to the channel bed but stays in suspension once it has been eroded.
   E. None of the choices is correct.

5. The lowest level to which a stream can erode is known as the:
   A. Hjulstrom diagram.
   B. Topset bed.
   C. Graded profile.
   D. Base level.
   E. Floodplain.

6. Channels generally take one of three forms:
   A. Oxbow, meander scar, and alluvial fan.
   B. Meandering, braided, and straight.
   C. Turbulent, laminar, and graded.
   D. Alluvial, aggraded, and erosional.
   E. None of the choices is correct.
7. Braided channels form when the:
A. Sediment load is too small.
B. Ability of the stream to transport sediment is larger than the amount of sediment.
C. Ability of the stream to resist erosion is great.
D. Ability of the stream to transport sediment is exceeded by the amount of sediment.
E. Stream discharge is very high.

8. The discharge of a channel that is 75 m wide, 3.2 m deep, with a flow velocity of 0.34 m/sec is:
A. 81.6 m$^3$/sec.
B. 8.16 m$^3$/sec.
C. 24.0 m$^3$/sec.
D. 240 m$^3$/sec.
E. None of the choices is correct.

9. Flooding is a result of:
A. Prolonged rainfall saturating the ground.
B. Rapid melting of winter snow and ice.
C. Rapid and heavy rainfall.
D. Presence of upstream artificial levels that pass the flood wave downstream.
E. All choices are correct.

10. Avulsion is when:
A. Flooding causes a stream to decrease discharge.
B. Flooding causes a stream to build an alluvial fan.
C. Flooding causes a stream to rejuvenate.
D. Flooding causes a stream to establish a graded profile.
E. Flooding causes a stream to establish a new channel to reach base level.
1. Groundwater is lost by:
   A. Base flow and groundwater discharge.
   B. Evaporation.
   C. Capillary flow.
   D. Darcy's law.
   E. All types of streams.

2. Which of the following is a characteristic of wetlands?
   A. Wetlands may recharge groundwater.
   B. Wetlands may be fed by groundwater discharge.
   C. Both of these.
   D. Neither of these.

3. Permeability is:
   A. The rate of groundwater flow above the water table.
   B. A measure of the ability of rock or sediment to transmit groundwater.
   C. The size of pore spaces.
   D. The cementation of grains in capillary fringe.
   E. None of these.

4. Groundwater flows in response to:
   A. Gravity and density.
   B. Gravity and porosity.
   C. Permeability and topography.
   D. Gaseous pressure and slope.
   E. Gravity and hydraulic pressure.

5. An aquifer is:
   A. Any water in the ground.
   B. Any water at the water table.
   C. A useful source of groundwater.
   D. Water that is confined by aquicludes.
   E. Groundwater that can be pumped from the ground.

6. Groundwater contamination may result from:
   A. Salt intrusion, illegal chemical disposal.
   B. Agricultural waste, pesticides.
   C. Landfill seepage, polluted runoff.
   D. Human sewage, leaky underground storage tanks.
   E. All of these.

7. Once human contamination enters the groundwater system, it may:
   A. Form a plume.
   B. Last for centuries.
   C. Be stripped of if it forms a gas
D. Be allowed to naturally attenuate.
E. All of these.
8. Groundwater remediation is:
   A. The activity of finding new aquifers.
   B. Recharge by polluted runoff.
   C. Cleaning up sewage before releasing it to a treatment plant.
   D. Flow in the direction of hydraulic conductivity.
   E. Cleaning polluted water.

9. Geysers:
   A. Are the reason why caves have speleothems.
   B. May occur as nonviolent pools of warm water.
   C. Are the main reason why groundwater migrates.
   D. Are violent eruptions of hot groundwater.
   E. All of these.

10. Most liquid freshwater is found:
    A. In rivers.
    B. In lakes and streams.
    C. In the ocean.
    D. As groundwater.
    E. During percolation.

11. Porosity is:
    A. The percentage of empty space in the crust.
    B. The percentage of connected space for groundwater movement in the crust.
    C. The percentage of crustal space filled with groundwater.
    D. The percentage of pore space in the crust located at the water table.
    E. The water in the capillary fringe.

12. An aquiclude may lead to formation of an artesian well because:
    A. It allows atmospheric pressure to drain an unconfined aquifer.
    B. It confines an aquifer and closes off groundwater recharge.
    C. It confines an aquifer so that hydraulic pressure increases leading to artesian flow.
    D. It causes karstification of crust.
    E. All of these.

13. Rainfall absorbs __________ to become acidic and dissolve limestone.
    A. Sulfur dioxide
    B. Oxygen
    C. Nitrous oxide
    D. Carbon dioxide
    E. Nitrogen