

Quiz - 10: Impacts - Water Resources

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Questions: 10

Finish**Save All****Help****1. Water budget equation** (Points: 10)

A simple equation for the water budget at the surface states that the net input from the atmosphere (precipitation - evaporation) is balanced by

- a. percolation + dehydration
- b. infiltration + change in water storage
- c. runoff + change in water storage
- d. runoff + overland flow

Save Answer**2. Growth in demand vs. availability** (Points: 10)

Two of the fastest growing states in the U.S. are also states where projected changes in water resources indicate that

- a. increased flooding will overwhelm attempts to harness water supplies.
- b. even current water demand might not be satisfied after 2020.
- c. salty water will intrude from the oceans and corrupt water resources.
- d. changes in fish habitats will compete for water resources.

Save Answer**3. Drought** (Points: 10)

One definition of drought is a deficiency of precipitation over an extended period that causes water shortage for some group or activity.

- True False

Save Answer**4. Factors determining water consumption** (Points: 10)

Possible factors directly driving water consumption are

- A. population
- B. technology
- C. economic policy
- D. food consumption
- E. global warming

- 1. A, B, C, D
- 2. B, D, E
- 3. A, C, E
- 4. A, B, C, E

Save Answer

5. Increasing water stress on humans (Points: 10)

Projections of climate change and demographics indicate that water-stressed populations at mid-twenty-first century may be N times larger than at the end of the twentieth century, where N =

- a. nearly 20.
- b. over 100.
- c. approximately 3-6.
- d. about 2.

Save Answer

6. Impacts of water cycle changes (Points: 10)

Under the A1B scenario, for last couple of decades of the twenty-first century in Bangladesh,

- a. flooded areas during peak annual river flow (discharge) may increase by 25%.
- b. electricity production by hydropower may decrease by more than 25%
- c. streamflow decreases may not satisfy water demand after 2020.
- d. river ice may clog major rivers.

Save Answer

7. Runoff changes (Points: 10)

Changes in annual runoff seen in most models at the end of the twenty-first century under the A1B scenario include (choose correct responses)

- a. decreases in the Mediterranean region
- b. decreases in the Amazon basin
- c. increases in the southwest US/northwest Mexico
- d. increases in East Africa

Save Answer

8. Irrigation (Points: 10)

Irrigation globally uses

- a. less than 10% of renewable water supply.
- b. a small fraction of water resources.
- c. about half of human water resources.

- d. over 70% of water withdrawals.

Save Answer

9. Human activities affecting water resources (Points: 10)

Changing land use can affect water resources management directly by changing (choose correct responses)

- a. human populations
 b. food demand
 c. water use
 d. terrestrial water amount

Save Answer

10. Human vulnerability (Points: 10)

Increased efficiency in water usage always reduces human vulnerability to changes in water resources.

- True False

Save Answer

Finish

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