SOCSCI SECTION EXAM 05

SECTION IV: WATER AND THE FUTURE OF HUMAN CIVILIZATION, PP. 70-81



- 1. Why is water conservation harder in wealthy countries?
 - a. Water consumption indicates a belief in the central government.
 - b. Water consumption is a leading indicator of social integration.
 - c. Water consumption is associated with high status.
 - Water consumption is required for a successful family life.
 - e. Water consumption is required for certain religious practices.
- 2. Where is MOST of Earth's freshwater?
 - a. cave springs
 - b. polar ice caps
 - c. mountain springs
 - d. deep underground lakes
 - e. freshwater rivers
- 3. Lawn-watering would MOST likely be restricted in
 - a. Massachusetts
 - b. Oregon
 - c. Minnesota
 - d. Colorado
 - e. Arizona
- 4. In the 1960s, Golda Meir warned Egypt to NOT
 - a. dump brine into the ocean
 - b. divert the Jordan River
 - c. build dams on the Nile River
 - d. export water to Iran
 - e. trade water resources with Bedouin tribes
- 5. Which country did Israel face in the Six-Day War?
 - a. Iraq
 - b. Libya
 - c. Iran
 - d. Syria
 - e. Kuwait
- 6. How has Israel attempted to curb water use?
 - a. rationing water for settlements far from Jerusalem
 - b. requiring all households to install waterefficient appliances
 - c. decreasing subsidies for wasteful agricultural practices
 - d. incentivizing farmers to raise livestock requiring minimal water
 - e. banning private efforts to build agricultural infrastructure

- 7. The film in reverse-osmosis filtration uses
 - a. hypochlorous acid
 - b. chlorine dioxide
 - c. trimesoyl chloride
 - d. hydrogen chloride
 - e. sodium chloride
- 8. What is the ratio of brine to potable water produced during the reverse-osmosis filtration process?
 - a. 4:1
 - b. 4:2
 - c. 3:2
 - d. 5:3
 - e. 3:1
- 9. In reverse-osmosis filtration, pressurized diffusers offer a solution for
 - a. dissipating brine over a large area
 - b. maintaining the structural integrity of the plant
 - c. removing salt from sea water
 - d. lowering the sodium content of brine
 - e. keeping water temperature low
- 10. What effect does brine produced from reverse-osmosis filtration have on the ocean?
 - a. It causes algae blooms.
 - b. It decreases the amount of dissolved oxygen.
 - c. It increases the pH.
 - d. It increases the density of water.
 - e. It lowers the sodium content.
- 11. Desal plants are BEST situated in areas benefiting from
 - a. low rainfall amounts
 - b. high ocean temperatures
 - c. graywater availability
 - d. fast ocean water currents
 - e. bivalve-dominated ecosystems
- 12. How did the Soviets build a canal in a 1971 experimental process demonstration?
 - a. They blew up a mountainside with dynamite.
 - b. They dug the canal with heavy machinery.
 - c. They conscripted thousands of workers to dig the canal.
 - d. They used towboats to move large mountain chunks.
 - e. They detonated a series of nuclear fusion bombs.

- 13. Which river was the focus of a Soviet plan to redirect water to Kazakhstan and Uzbekistan?
 - a. Ussuri
 - b. Lena
 - c. Volva
 - d. Oka
 - e. Kama
- 14. "Project Chariot" attempted to construct a(n)
 - a. underground pipe system
 - b. drainage canal
 - c. aquifer transport system
 - d. above-ground aqueduct
 - e. artificial harbor
- 15. Who played an important role in promoting the viability of iceberg towing?
 - a. Golda Meier
 - b. Robert Koch
 - c. John Isaacs
 - d. Muhammad Ali
 - e. Xi Jinping
- 16. What is the PRIMARY purpose of the South-North Water Transfer Project?
 - a. to access water in an aquifer
 - b. to drain marshlands via canals
 - c. to use water to power a hydroelectric dam
 - d. to move water from a river via canals
 - e. to reroute a river to a desert
- 17. Metal hybrids could play a key role in
 - a. removing sodium from brine
 - b. improving reverse-osmosis filtration
 - c. manufacturing water in a laboratory
 - d. stopping invasive species in inland lakes
 - e. reducing acidic emissions
- 18. Which region could benefit from fog harvesting?
 - a. east coast of Asia
 - b. west coast of South America
 - c. north coast of Africa
 - d. northern coast of Europe
 - e. northern coast of Australia
- 19. Which idea supports the possibility of mining water from heavenly bodies?
 - a. Water is found on large gas giants.
 - b. Water can be harvested from dying stars.
 - c. Water arrived on Earth because of collisions with these bodies.
 - d. Water is abundant in space.
 - e. Water can withstand environments with no gravity.

- 20. Which of the following factors MOST contributes to the current variability of the Rio Grande River?
 - a. sulfate emissions
 - b. hydroelectric dams
 - c. global climate change
 - d. invasive species breeding
 - e. wasteful farming practices
- 21. Mexico and the United States signed Minute 323 to
 - a. enforce water rights
 - b. place withdrawal limits on a river
 - c. restore the flow of a river
 - d. negotiate aquifer water rights
 - e. reduce agricultural emissions
- 22. Which dam is on the Colorado River?
 - a. Lawrence Dam
 - b. Hoover Dam
 - c. Glen Canyon Dam
 - d. Optima Dam
 - e. Folsom Dam
- 23. In which region does the Nu/Thanlwin/Salween River originate?
 - a. Tibet
 - b. Gansu
 - c. Shanxi
 - d. Guangxi
 - e. Sichuan
- 24. Upstream dams on the Nu/Thanlwin/Salween River could
 - a. lead to widespread flooding in Myanmar
 - b. force the large-scale migration of Chinese farmers
 - c. endanger local water dolphins
 - d. cause soil salinization in all impacted countries
 - e. cause saltwater to infiltrate the delta
- 25. How many people depend on the fish found in Lake Victoria?
 - a. 45 million
 - b. 50 million
 - c. 30 million
 - d. 35 million
 - e. 40 million

- 26. Why are water hyacinths blooming in Lake Victoria?
 - a. The Nile Perch is becoming the dominant lake species.
 - b. The nitrate concentration of the lake is increasing.
 - c. The local plant has placed brine into the lake.
 - d. Industrialists have diverted lake water for the textile mills.
 - e. Humans are dumping untreated water into the river.
- 27. Where is the "Great Manmade River Project" located?
 - a. Mali
 - b. Chad
 - c. Egypt
 - d. Sudan
 - e. Libva
- 28. MOST of the water coming from "Great Manmade River Project" is used for
 - a. urban uses
 - b. textile manufacturing
 - c. steelwork facilities
 - d. desert irrigation
 - e. power generation
- 29. The "tragedy of the commons" assumes humans will
 - a. damage a shared resource
 - b. fail to collaborate on political treaties
 - c. conduct diligence on commercial transactions
 - d. engage in illegal practices
 - e. develop despotic regimes
- 30. Which aquifer is under Niger?
 - a. Ganges-Brahmaputra
 - b. Nubian Sandstone
 - c. Indus Basin
 - d. Iullemeden
 - e. Guarani
- 31. Why have operations recently been disrupted at the "Great Manmade River Project"?
 - Farmers have staged strikes at the main facility.
 - Underground pressure is causing the pipes to burst.
 - c. Terrorists have dismantled the pipes.
 - d. The temperature is too high for stable operations.
 - e. The lower levels of the facility are submerged.

- 32. Some hydrologists predict the Nubian Aquifer will run out of water in
 - a. 40 years
 - b. 100 years
 - c. 60 years
 - d. 80 years
 - e. 20 years
- 33. Which aguifer could be a potential global resource?
 - a. Guarani
 - b. Iullemeden
 - c. Nubian Sandstone
 - d. Indus Basin
 - e. Ganges-Brahmaputra
- 34. One of the earliest projects of the Israeli state focused on
 - a. building a hydroelectric dam
 - b. rerouting the Jordan River
 - c. researching reverse-osmosis filtration
 - d. establishing settled farms
 - e. moving water out of a local aquifer
- 35. What approximate percentage of Earth's water is freshwater?
 - a. 3.0%
 - b. 2.5%
 - c. 1.0%
 - d. 2.0%
 - e. 1.5%
- 36. In the 1994 treaty between Israel and Jordan, Israel promised to
 - a. send water to Syria
 - b. slow down soil salinization rates
 - c. cooperate on water projects
 - d. stop construction of hydroelectric dams
 - e. ban intensive agriculture near the Jordan River
- 37. During which administration was reverse-osmosis filtration developed?
 - a. Kennedy administration
 - b. Nixon administration
 - c. Regan administration
 - d. Johnson administration
 - e. Ford administration
- 38. Why has the Carlsbad desal plant been repeatedly fined?
 - a. It failed to meet its export quotas.
 - b. It introduced an invasive species to the local ecosystem.
 - c. It contaminated local water wells.
 - d. It dumped excessive amounts of brine into the ocean.
 - e. It violated an international treaty.

- 39. What is the approximate share of San Diego County's water supply produced by the Carlsbad desal plant?
 - a. 4%
 - b. 13%
 - c. 10%
 - d. 16%
 - e. 7%
- 40. Which negative effect did Soviet scientists associate with the proposed rerouting of Siberian Rivers?
 - a. extinction of certain Siberian wildlife
 - b. destruction of Siberian nomadic pastoral grounds
 - increase in soil salinization for delta-region farmers
 - d. catastrophic change to the Arctic Ocean's chemical balance
 - e. decrease in quality of life for Arctic Ocean fishermen
- 41. Why is iceberg towing not a viable solution for water access?
 - a. The icebergs would melt too quickly.
 - b. The process requires nuclear technology.
 - c. The water requires intensive purification.
 - d. The cost is prohibitive.
 - e. The water has too many minerals.
- 42. Which river forms half the border of the United States and Mexico?
 - a. Russian
 - b. Rio Grande
 - c. Missouri
 - d. Mississippi
 - e. Colorado
- 43. The Chinese have announced dam construction plans on the Nu/Thanlwin/Salween River to
 - a. irrigate desert terrain
 - b. drain infested swamps
 - c. export freshwater abroad
 - d. lessen fossil fuel dependencies
 - e. power local fusion plants
- 44. An agreement between Uganda and Egypt attempted to
 - a. build a new dam
 - b. negotiate river water rights
 - c. build aquifer infrastructure
 - d. settle disputes regarding fishing rights
 - e. preserve the depth of a lake

- 45. Which country borders Lake Victoria?
 - a. Libva
 - b. Tanzania
 - c. Egypt
 - d. South Africa
 - e. Tunisia
- 46. Which statement BEST describes a weakness of the Guarani Aquifer Agreement?
 - a. It pays countries a nominal amount to participate.
 - b. It set overly strict controls on aquifer access.
 - c. It has a pending expiration date.
 - d. It omits one of the major regional actors.
 - e. It lacks an enforcement mechanism.
- 47. By the 1970s, scientists learned that industrial emissions
 - a. contaminated freshwater lakes
 - b. reduced nitrogen levels in the ocean
 - c. halted select parts of the water cycle
 - d. lowered the pH of water
 - e. lowered temperatures in the polar ice caps
- 48. How does a cap-and-trade system PRIMARILY decrease emissions?
 - a. requiring businesses to draw water from desal plants
 - b. placing a cost on pollution
 - c. banning certain types of pollution
 - d. requiring businesses to file permits for pollution
 - e. establishing a government agency designed to enforce environmental law
- 49. Which country was the LAST to ratify the Guarani Aquifer Agreement?
 - a. Brazil
 - b. Uruguay
 - c. Paraguay
 - d. Bolivia
 - e. Argentina
- 50. LRTAP has succeeded PRIMARILY in reducing
 - a. freshwater contamination
 - b. sulfur emissions
 - c. brine ocean deposits
 - d. native species extinction
 - e. deforestation practices