



1. John Holdren and Paul Ehrlich came up with this formula on environmental impacts caused by human population and described is thus: I=P.A.T. The A stands for
 - a) Affliction
 - b) Appropriation
 - c) Affluence
 - d) Articulation
 - e) Applied
2. The IPAT formula differs from traditional neo-Malthusian population theories in that ...
 - a) it points to the developed countries as having greater environmental impact
 - b) it ignores the huge number of poor people
 - c) it exaggerates the role of technology
 - d) it makes population a small variable
 - e) (none of the above).
3. Following consumption patterns in the US (using 1990 figures) the global comparisons show that for global consumption to reach US per capita consumption ... (which one is false?)
 - a) The world would have to increase plastic production by 530 million tons
 - b) World production of aluminum would have to increase 6.3 times
 - c) Salt production would have to increase to over 860 million tons
 - d) Industrial sand and gravel would have to increase fourfold.
 - e) Copper would have to be produced at rates ten times the US consumption.
4. Anthropocentrism is built into Abrahamic religions (Christianity, Judaism, Islam) in the concept that
 - a) humans need salvation from the Devil.
 - b) God gives the earth to humans to dominate nature.
 - c) humans should be good stewards of nature.
 - d) humans aren't from here.
 - e) humans should take it all.
5. William McDonough argues that the problem with modern manufacturing is that the separation of "biological nutrients" from "technical assets" is too costly to be practical, thus making proper recycling difficult. **True or False?**
6. "Cradle to Cradle" is a concept that... (which one is false?)
 - a) looks at life cycle analysis of all products
 - b) traces the resource origin of products
 - c) presses toward a closed loop economy instead of cradle to grave.
 - d) supports 100% recycling
 - e) proposes a full service baby supplies in retail.
7. The concept of industrial ecology breaks down the life cycle of aspects of industrial production and scores each so that low scores (0) means that the process is as sustainable as we currently know how. **True or False?**
8. According to the model target diagram in industrial ecology, the easiest goals to reach are in disposal and recycling as well as packaging and delivery. **True or False?**
9. Two objectives in a deliberate move to a sustainable economy are
 - a) Denuclearization and desalination
 - b) Dematerialization and decarbonization
 - c) Deindustrialization and detechification
 - d) Devolution and simplicity
 - e) None of the above.
10. Carbon dioxide emissions per unit of energy (kg of CO₂ per Gjoules of energy) have been dropping since 1850. **True or False?**
11. Energy intensity in the United States (the amount of energy needed to produce a dollar of GDP) has increased since 1950. **True or False?**
12. Although the 1990s saw many years of positive economic growth, this decade is also one where the rate of personal savings contracted from 7.5% to approximately 2.5%. **True or False?**
13. Consumerism is a problem in the modern world because it defines personal satisfaction of infinite material needs as central to the economy. To challenge this we need to ask "How much is enough?" and "How do I know what I want?" These questions are attributed to Henry David Thoreau, the transcendentalist writer. **True or False?**



14. Examples of non-material needs are (which one is not):
 - a) Affection
 - b) Justice
 - c) A sense of self-worth
 - d) Social support
 - e) Fine dining.

15. The purpose of economic development said the economist W.W. Rostow was to
 - a) Create a sustainable world
 - b) Usher in a golden age of mass consumption
 - c) Prepare infrastructure for increased trade
 - d) Close the materials economy loop
 - e) To substitute the ballot box with a cash register.

16. Examples of new choices in consumption that are environmentally sustainable include all but one of the following...
 - a) Leadership in Energy and Environmental Design, LEED
 - b) Forest Stewardship Council, FSC, sustainable lumber
 - c) Amazon
 - d) Seafood Watch
 - e) Marine Stewardship Council, MSC, for seafood

17. A key definition of sustainable development is that it is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Therefore, it is critically important to understand what we mean by needs. The UN World Commission of Environment and Development emphasizes the needs of advanced industrial societies come first. **True or False?**

18. Economic growth is a friend of the economy and an enemy of the environment because (which is not true?)
 - a) It is the “rising tide that raises all boats.”
 - b) It delays reckoning with environmental impacts
 - c) It produces the linear economy
 - d) It rewards consumption
 - e) It makes crises something to grow out of.