

Directions: The questions in this section are based on the reasoning contained in brief statements or passages. For some questions, more than one of the choices could conceivably answer the question. However, you are to choose the best answer; that is, the response that most accurately and completely answers the question. You should not make assumptions that are by commonsense standards implausible, superfluous, or incompatible with the passage. After you have chosen the best answer, blacken the corresponding space on your answer sheet.

1. Ocean divers have recently discovered the wreckage of a ship lying in the sedimentary layer at the bottom of the Atlantic Ocean. The sedimentary layer of the Atlantic Ocean is believed to have fully developed by the year 1000 A.D., and it is believed that the final hundred years of development were quite volatile and would have completely covered anything that would have rested there prior to 900 A.D. As a result, the divers have determined that this wreckage could not be that of the Viking ship *Visalia*, which is known to have set sail in the Atlantic Ocean in 850 A.D.

Which of the following, if true, most seriously weakens the argument above?

- (A) Through carbon dating, it has been shown that some of the ships recently discovered in the sedimentary layer of the Indian Ocean were built in the eighth century A.D.
- (B) Ship building experts have determined that the design of the *Visalia* was inherently flawed, and the ship almost certainly would have sunk within weeks of setting sail.
- (C) Certain fossils of now extinct fish, believed to have flourished in the period of 700 – 900 A.D., have been found in the Atlantic Ocean.
- (D) Some ships that have been discovered in the sedimentary layer of the Atlantic Ocean may have rested in the layer of rock just above the sedimentary layer for hundreds of years before coming to rest in the sedimentary layer itself.
- (E) Historians reviewing historical records have determined that the *Visalia* never reached its intended destination and neither did it return to its original port.

2. Scientists have long searched for signs of life beyond planet Earth, both in our own Milky Way galaxy and in galaxies distant from our own. While there is some debate as to whether or not such life exists, there is near universal agreement that certain atmospheric conditions must be present if a given planet, asteroid, or other celestial body is indeed to support life forms. These atmospheric conditions necessary to support single cell or multi-cellular organisms can be wide ranging, but generally there has to be water present in some form for life as we know it to exist elsewhere in the universe.

If all of the above statements are true, then which of the following can most logically be inferred?

- (A) The recent discovery that Mars was once covered with polar icecaps indicates that Mars may be capable of supporting life.
- (B) Scientists searching for life elsewhere in the universe tend to believe that such life does exist.
- (C) The discovery of life on a celestial body, in our own galaxy or in another galaxy, must coincide with an abundance of water on that celestial body.
- (D) There has never been any water detected on Pluto, so it is impossible for Pluto to support any life form.
- (E) Scientists currently have adequate technological equipment to detect the presence of various life forms on distant planets.