

Questions 1 and 2 are based on the passage below.

The idea of medical nanotechnology often conjures up the potentially troubling image of tiny machines and devices that both exist and operate far outside the scope of unmagnified human vision. Yet much of what constitutes nanotechnology is purely biological in form and function. For example, strands of DNA and the proteins that make up its structure are mere nanometers thick. Many of the basic functions of life occur on the nanoscale level. Efforts to understand or affect these functions are among the primary fields of nanotechnology. Gene study and gene therapy, two by-products of medical nanotechnology, have already proven useful for identifying and treating a number of different diseases, sometimes even before symptoms of those diseases present themselves. **Even so, genetic nanotechnology and treatments can give as much cause for concern as the idea of microscopic machines at work in the body.** The possibility of altering an organism's genetic structure has been a subject of much debate as to what extent such an alteration would be both safe and ethical.

Questions 3 through 5 are based on the passage below.

Although it is an imperfect model for describing a complex market, the theory of supply and demand is a reasonably accurate method of explaining, describing, and predicting how the quantity and price of goods fluctuate within a market. Economists define supply as the amount of a particular good that producers are willing to sell at a certain price. For example, a manufacturer might be willing to sell 7,000 sprockets if each one sells for \$0.45, but would be willing to sell substantially more sprockets, perhaps 12,000, for a higher price of \$0.82. Conversely, demand represents the quantity of a given item that consumers will purchase at a set price; in the most efficient market, all buyers pay the lowest price available, and all sellers charge the highest price they are able. The intersection of these occurrences is graphically represented in supply and demand curves that show the prices at which a product becomes too expensive or too readily available.