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Quiz: Week 1 Lecture 1
Principles of Electronic Nanobiosensors
Muhammad A. Alam, nanoHUB-U Fall 2013

Answer the four questions below by choosing the one, best answer.

1) Nanobiosensors are necessary because
   a) Biomolecules cannot be detected by traditional sensors at all.
   b) Biomolecules move too fast in a fluidic environment; large sensors cannot capture them.
   c) Nanobiosensors require very little energy to operate.
   d) Nanobiosensors can detect biomolecules at ultra-low concentrations.

2) Which of the following is true about the nanobiosensors?
   a) These sensors are the first to integrate electronics with biotechnology.
   b) All the dimensions of these sensors must be measured in nanometers.
   c) At least one of the sensor dimensions should be measured in nanometers.
   d) Only nanobiosensors can read the DNA sequence of a human genome.

3) Nanobiosensors may enable Lab-on-a-Chip technology, because
   a) The sensors can be miniaturized.
   b) The sensors can be integrated with other electronic components.
   c) They can operate with small analyte volume.
   d) All of the above.

4) The phrase ‘personalized medicine’ refers to
   a) The right to choose a personal doctor for every citizen.
   b) A guarantee that the genetic information remains private and will not be shared.
   c) The ability to tailor medication to a person’s genetic information so that the harmful side-effects are reduced.
   d) The cost of the medicine is tailored according to the ability to pay.

End of quiz. This quiz contains 4 questions.