Sample Questions from International Brian Bee Competition

Note: these represent some of the most difficult types of questions that will be asked. See study outline for examples of more general questions.

Answers are on second page. But don't look now, try them first!

- 1. Approximately how many neurons does the brain contain?
- 2. Name the device that measures brain waves.
- 3. Drugs that relieve symptoms of depression might work by affecting which neurotransmitters?
- 4. The Greek word for "the branches of a tree" give us the name of what part of a neuron?
- 5. Name the brain region affected in Parkinson's patients.
- 6. The biologic clock is located in what part of the brain?
- 7. Name the brain disorder named after the famous baseball player, Lou Gehrig.
- 8. What is a common type of *inherited* mental retardation?
- 9. Name the peptide that accumulates in the senile plaques of brains of Alzheimer's patients?
- 10. What is the leading preventable cause of mental retardation in children (hint: caused by a drug of abuse)?
- 11. The abbreviation PET stands for what brain imagine technique?
- 12. What do netrins and semaphorins do?
- 13. Name a cognitive disorder associated with chronic alcoholism.

Sample Question Answers

- 1. 100 Billion
- 2. Electroencephalograph (EEG)
- 3. Serotonin or norepinephrine
- 4. Dendrites
- 5. Basal ganglia
- 6. Hypothalamus
- 7. Amyotrophic lateral sclerosis (ALS)
- 8. Fragile X Syndrome
- 9. Beta Amyloid
- 10. Fetal Alcohol Syndrome
- 11. Positron emission tomography
- 12. They are signaling molecules that guide the growth cones of axons during development
- 13. Korsakoff's Syndrome