History of Psychology
Test on Chapters 1, 2, and 3

1. What are the academic disciplines that psychology was built upon?

   The academic disciplines that psychology was built on were philosophy and physiology.

2. Define the term *Zeitgeist* **and** name three factors that are part of it.

   The term Zeitgeist refers to the spirit of the times. Three factors are part of Zeitgeist theory economics, technology, and social influences.

3. Define *determinism* and *empiricism*.

   Determinism is the belief that every act is determined or caused by past events. Empiricism is the pursuit of knowledge through observing nature and attributing all knowledge to experience.

4. What are the differences between John Locke and Rene Descartes in terms of how they believed humans gained knowledge?

   Locke believed that knowledge was gained through experience, and Descartes believed that knowledge was innate and could be accessed through reason.

5. Define the *Spirit of Mechanism* **and** explain why it was important.

   The spirit of mechanism is defined as the universe being seen as an enormous machine. The spirit of the world during the 17^{th} century was a fascination with mechanical figures. It changed the way the world looked at themselves and the world they lived in. It led to scientific investigation and empirical evidence, which helped develop the scientific method.

6. What was unique about the way that James Mill viewed the human mind and what was his goal

   James Mill was unique in his application of the doctrine of mechanism to the human mind with directness and comprehensiveness. His goal was to smash the illusion of all

subjective or psychic activities and to show that the mind was nothing more than a machine. He felt strongly about the reason being the same as a working machine being predictable mechanically. Therefore, Mill did not believe in the concept of a person having free will.

7. What was the significance of David Kinnebrook's mistake?

   David Kinnebrook lost his job for making a mistake by observing something five-tenths of a second different from Maskelyne's observation. The significance of this mistake was that it was later found to play an essential role in founding psychology's science.

8. Why were the early developments in physiology significant to the field of psychology?

   Physiology's developments were significant to psychology because they showed the kinds of research techniques and discoveries that supported the scientific approach to the psychological investigation of the mind. During the early development of physiology, they experimented with the mechanisms that underlie mental phenomena. Another significant development in physiology was the observation of sensations and perception, which led to defining the structure and functions of the senses. Techniques were being developed to explore the mind. These developments helped the start of experimental psychology.

9. What was extirpation, and of what value was it to psychology at that time?

   Extirpation is a method in which the researcher tries to determine the function of specific parts of the brain by removing or destroying them and observing the changes in the animal's behavior. This method of extirpation introduced two different experimental approaches to brain research, which were valuable to psychology. These were the clinical method and the electrical stimulation technique.

10. Why did so many of the early developments in psychology happen in Germany?

    The reason for so many early developments in psychology in Germany was the liberty they offered to new scientific approaches and research. Germans were interested in biology and defined science broadly and accepted much different science, which gave liberties to great minds to develop many significant discoveries in the mind and body. There was much skepticism about applying science to the complex human mind from other countries but not in Germany. They moved forward unconstrained, using science tools to explore and measure all facets of mental life.

11. What was Hermann Helmholz's significant contribution to psychology?

    Helmholz's significant contribution to psychology was his study and research on the speed the neural impulse and his research on vision and hearing. To psychology are Helmholtz's investigations of the speed of the neural impulse and his research on vision and hearing. Helmholtz provided the first empirical measurement of the rate of conduction by stimulating a motor nerve and the attached muscle in a frog's leg. His vision research investigated the external eye muscles and the mechanism by which internal eye muscles focus the lens. Lastly, another contribution was his extensive and significant body of knowledge in studying the human senses.

12. What is the two-point threshold?

    In the two-point threshold, subjects are asked to report whether they feel one or two points touching the skin without looking at the apparatus. This procedure demonstrates the two-point threshold at which the two separate sources of stimulation can be distinguished.

13. What is the just noticeable difference?

    The just noticeable difference is the smallest difference between weights that could be detected. Weber asked his subjects to lift two weights—a standard and a comparison weight—and to report whether one felt heavier. Minor differences between the weights resulted in judgments of sameness; significant differences resulted in decisions of disparity between the weights. Weber then studied how muscle sensations contributed to a person distinguishing between weights. He found that subjects could discriminate more accurately when they lifted the weights versus having the experimenter put them in their hands.

14. What two ways did Fechner propose for measuring sensation?

    The first way Fechner found to measure sensation was the stimulus change threshold. So Fechner proposed the point of sensitivity at which the least amount of change in a stimulus gives rise to a change in sensation. The second was the absolute threshold. Here Fechner proposed the point to sensitivity below which no sensations can be detected and above which sensation can be experienced.

15. According to Fechner what does a change in sensation depend on?

    Depends on the amount of stimulation.