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PSY 321 Test #1
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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 upon was philosophy, biology and physical sciences.

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

Zeitgeist refers to the culture and intellect of a specific time period typically related to the economic, social and political forces. Three factors that are a part of the contextual forces are economic opportunity, world wars and prejudice and discrimination.

3. Define *determinism* and *empiricism*.

Determinism says that everything can be determined because of cause and effect relationships. Empiricism is based on experiments, observations and facts that one gathers from experiences.

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

John Locke believed that humans were born with no knowledge and only developed knowledge through experiences. Renee Descarates also believed that humans gained knowledge through experiences but he believed that human behaviors and functions were controlled by mechanical laws.

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

The *spirit of mechanism* means that the universe acts as a great machine that is always working and everything in the world is precise and measurable like a clock. This was important because it influenced how people understood themselves in the world as working together as in physics and chemistry with one thing affecting another.

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

James Mill viewed the human mind as a machine. He believed that different stimuli and experiences did affect human thinking, however he did not agree that the human mind had free will or creative thinking. He believed that the human mind was a blank slate and that whatever it was filled with, would dictate what would come out of it. So he raised his son in a strict manner, filling his brain with every kind of study, knowing that he could control what his son's mind was filled with.

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

The significance of Kinnebrook's mistake is that it led another astronomer to be interested in measurement errors due to differences amongst human beings in characteristics and perception and how they observe things. This astronomer found "personal equation" which taught that there were differences and disagreements amongst people that cannot be controlled. So even though his time that he observed took from a star to pass from one point to another was slower than his boss, Nevil Maskelyne's time, 20 years later it taught the varying ways human minds observe things.

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

The early developments in physiology were important to the field of psychology because the physiologists focused highly on experimental methods for building studies and specifically Johannes Muller's theory that each nerve has a specific energy that is brought about by stimulation and produces a sensation.

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

Extirpation is a technique that was used by researchers to study the functions of each part of the brain, by removing a specific part and observing the changes and lack of activity that took place due to that part being absent. It was valuable to psychology at the time because it showed the importance of the cerebrum in controlling higher mental processes, the midbrain controlling hearing and visual reflexes, the cerebellum was important for coordination and the medulla controlled respiratory, heart and other vital functions.

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

Germany was the breeding ground for experimental science since they were more open to creating spaces and environments to discover and observe further studies. Where most European countries were set on mathematical approaches, Germany saw there were deeper classifications and descriptions in science such as psychology and filtered through the German universities that began to implement academic freedom and new approaches to exploring psychology.

11. What was Hermann Helmholtz's major contribution to psychology?

Helmholtz ranked third among his areas of scientific contribution in his mechanistic and deterministic approach where he invented the ophthalmoscope, he found how to measure the speed of neural impulse and he did much research on vision and hearing and speech conduction.

12. What is the two-point threshold?

The two point threshold was the first mark of a systematic demonstration of the word threshold through an experiment that shows the point when a psychological effect starts.

13. What is the just noticeable difference?

The just noticeable difference showed the smallest distance between weights that can be detected. Ernst Weber was the researcher that contributed to the understanding of these concepts to show muscle differentiation and two stimuli consistent for each of the human senses.

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

Gustav Fechner wrote about psychophysics and the fact that the mind and the body work together. He believed that the body's responses to stimuli and sensations were dependent on internal processes and vice versa; the psychology and the physics were different but needed each other.

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

According to Fechner, a change in sensation depended on the relationship between a mental sensation in a material stimulus; so to measure the change in sensation, you must measure the change in stimulation.