

# Assignment1

Psychology



Psychology Question Recognition-by-component model advanced by Irving Biederman describes object processing in humans. Biederman theorized that object processing is a bottom-up process whereby, any angle of an object is represented mentally as an arrangement of 3D images (geons). According to him, humans possess an average of 36 geons, which they use to recognize the multitude of objects present in their surroundings. By combining very few geons, individuals are able to recognize what an object is whether or not it is partially obstructed.

Gestalt principles to identify obscure objects include;

Similarity- this principle infers that humans perceive stimuli that physically resemble each other as belonging to one object whereas, they perceive stimuli that have disparities as belonging to different objects when all factors are constant. This principle enables individuals to process a reduced number of stimuli in order to perceive an object; for example, an individual is able to tell what a partially obstructed object is from the few shapes they are able to see.

Closure- this principle infers that the human mind has the basic tendency to visualize complete figures even when dealing with incomplete figures; for example, partially construed objects.

Good form- this principle infers that individuals have a tendency to coalesce objects with similar shapes, colours and patterns. Individuals are able to fill in the gaps of partially construed objects in order to determine what they are using shapes, colours and patterns.

Question 2

Inattentional blindness refers to an individual's failure to notice stimuli within the environment as their attention is diverted towards other stimuli. It is a <https://assignbuster.com/assignment1/>

psychological deficit and not a product of physiological deficits. Inattention blindness occurs on a daily basis whereby, a person concentrating on a specific task fails to notice unexpected, ongoing activities. For example, students in an exam room struggling to finish the exam within a set time frame barely notice small distractions caused by other students such as fiddling with writing material on the desk.

### Question 3

The central executive, which is a component of the short-term memory (working memory) is responsible for monitoring the operations of the visual-spatial sketchpad and the phonological loop. Due to its superiority over the latter components, it is also responsible for prioritization of mental tasks. Meaning, it identifies which mental tasks can occur concurrently and those that require an individual's full attention. For example, individuals find it difficult to solve arithmetic problems while seriously listening to other people conversing. In such a situation, the central executive decides, which task gains precedence over the other using an individual's subjective experiences as a filter. Conversely, multitasking is a common phenomenon among individuals. Extrinsic and intrinsic factors motivate an individual's ability to multi-task. For example, a mother with a new born child is able to cook, watch the baby, and listen to her favourite music at the same time because they have proper incentives motivating their ability to multitask.